CALTRAIN ELECTRIFICATION PROGRAM

San Francisco to San Jose (MP 0.0 to 52.0)

U.S. Department of Transportation

Federal Transit Administration

Environmental Assessment/ Final Environmental Impact Report

Volume III

Written Public Comments to the Environmental Assessment/Draft Environmental Impact Report

PENINSULA CORRIDOR JOINT POWERS BOARD

July 2009

FINAL

Public Comments Received on the Caltrain Electrification Program Environmental Assessment / Draft Environmental Impact Report

INTRODUCTION

The Caltrain Electrification Program Environmental Assessment / Draft Environmental Impact Report (EA/DEIR) was released for public review on April 5, 2004. Display ads noticing availability of the Draft EIS/EIR were published in the San Francisco Chronicle, San Jose Mercury News, Palo Alto Daily News, Redwood City Daily News, San Mateo Daily News, and Burlingame Daily News, and similar information was posted at Caltrain stations and in "Take One" cards on trains. About 300 flyers were directly sent to the entire project mailing list to announce the availability of the EA/DEIR and advertise the public hearings.

As announced, the EA/DEIR was made available for on-line review on the Caltrain web site, and 238 printed copies of the EA/DEIR were directly mailed to agencies and individuals. The document was also available for review at the following locations:

- Caltrain Headquarters, Second Floor Reception, 1250 San Carlos Ave., San Carlos
- San Francisco Central Library, 100 Larkin Street (at Grove)
- Main libraries of cities along the Caltrain Corridor.

Four public hearings were held:

- Thursday, April 22, 2004 at 6:00 until 8:00 pm – 600 Townsend Street at 7th Street, San Francisco,
- Saturday, April 24, 2004 at 10:00 am until noon – Sunnyvale Community Center Arboretum, 550 E. Remington Drive, Sunnyvale, Santa Clara,
- Wednesday, April 28, 2004 at 6:00 until 8:00 pm – Morgan Hill Cultural and Community Center, 17000 Monterey Road, Morgan Hill, and
- Saturday, May 1, 2004 at 10:00 am until noon – Caltrain Headquarters, 1250 San Carlos Avenue, San Carlos, California.

The comment period extended from April 12 until May 25, 2004.

This final environmental document consists of three volumes. Volume I is the Revised EA-Proposed Finding of No-Significant Impact / Final EIR (which is the EA/DEIR as amended). Volume II contains responses to public and agency comments on the EA/DEIR, and Volume III contains copies of written comments and summaries of comments made at the public hearings.

In the present Volume III, all public and agency comments received on the Draft EA/EIR are presented. These are copies of letters, faxes, e-mails, and minutes from the four public hearings that present comments on the proposed program. It should be emphasized that all the comments in these letters are repeated in Volume II where they are organized into specific topic categories in order to provide responses in an easy to understand and organized manner.

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I Federal Agencies

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

May 25, 2004

Mr. Jerome Wiggins
Program Specialist, Office of Planning and Programming
U.S. Department of Transportation, Federal Transit Administration, Region IX
201 Mission Street, Suite 2210
San Francisco, CA 94105

Subject: Environmental Assessment/Draft Environmental Impact Report for Caltrain Electrification Program from San Francisco to Gilroy, California

Dear Mr. Wiggins:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. EPA appreciates the Federal Transit Administration's (FTA) efforts to solicit our input on this project. Our detailed comments are enclosed.

EPA is generally supportive of projects like the Caltrain Electrification Program that have the potential to reduce emissions resulting from diesel engines. Our attached recommendations focus on several points that would inform the assessment of environmental impacts from the proposed project and include: (1) disclosing the direct, indirect, and cumulative impacts associated with new road development, (2) identifying the potential indirect impacts to water resources, and (3) analyzing cumulative impacts on the local and regional energy demand. Additional comments are provided regarding integration with other rail improvements, invasive species management, air quality impacts, and proposed mitigation commitments.

We appreciate the opportunity to review this Environmental Assessment/Draft Environmental Impact Report (EA/DEIR). When the Final EA is released for public review, please send two copies to the address above (mail code: CMD-2). If you have any questions, please contact me or Connell Dunning, the lead reviewer for this project. Connell can be reached at (415) 947-4161 or dunning.connell@epa.gov.

Sincerely,

Lisa B. Hanf, Manager
Federal Activities Office

Enclosures:

Printed on Recycled Paper

EPA's Detailed Comments

cc:
Erik Olafsson, Senior Planner, San Mateo County Transit District

EPA DETAILED COMMENTS ON THE ENVIRONMENTAL ASSESSMENT FOR THE CALTRAIN ELECTRIFICATION PROGRAM - SAN FRANCISCO TO GILROY, CALIFORNIA, MAY 25, 2004

Road Development

The Caltrain Electrification Program will construct 13 traction power facilities in selected locations along the Caltrain Corridor with electrical conduits between the facilities. The Environmental Assessment (EA) states that electrification will require the construction of access roads between power facilities and the Caltrain right-of-way (p. 3-118, p. 4-3). The EA does not provide an estimate of the number, length, and location of new roads required for electrification, nor does it disclose the potential environmental impacts of new road development. Roads required for project construction and operation for Caltrain electrification are connected actions (40 CFR Part 1508.25(a)) pursuant to the National Environmental Policy Act (NEPA) and all direct, indirect, and cumulative impacts of new road development should be analyzed through the environmental review process.

Recommendations:

Describe the number, length, and location of proposed roads required for the Caltrain Electrification Program and disclose the direct, indirect, and cumulative impacts that these roads will have on environmental resources, specifically air quality and water resources. Clarify whether new roads will be permanent or will be removed and revegetated following project construction.

Water Resources

The EA states that all potential jurisdictional waters of the United States (waters) in the project area that parallel the existing tracks occur outside the project right-of-way and would not be affected by project construction (p. 3-36). The EA also states that the line of poles for the overhead electrification contact system can be constructed without encroaching into waters that lie longitudinally along the edge of the Caltrain right-of-way. The right-of-way for the proposed project is adjacent to both Brisbane Lagoon and the San Francisco Bay and one traction facility is proposed to be constructed adjacent to Los Gatos Creek.

Recommendations:

Disclose the distance between the project right-of-way and nearby water features, such as Brisbane Lagoon, San Francisco Bay, and Los Gatos Creek, and identify whether the project will have indirect and cumulative impacts to these features during project construction and operation. Clarify the methods available to avoid waters including flexibility regarding the placement of electrification infrastructure.

Energy Resources

The Caltrain Electrification Program is expected to increase annual electricity use by Caltrain and decrease use of diesel fuel and gasoline. Successful implementation of the proposed project depends on the availability of sufficient sources of energy. Information presented in the EA identifies the number and capacity of energy facilities that were either operational or under construction as of 2001 and concludes that future supply is expected to be adequate to meet growth in demand, given the number of power plants in the pipeline or in planning. The energy analysis did not take into consideration the cumulative impact of other planned projects that will also increase demand on the existing energy supply.

Recommendations:

Update the 2001 values presented in Section 3.10.1.3 describing the number and capacity of energy facilities that are either operational or under construction and analyze whether existing and planned facilities will provide adequate power supply for the proposed project and the region. Include a cumulative impact analysis of the impact of the proposed project and other reasonably foreseeable projects that will also increase the demand on the regional energy supply. Reasonably foreseeable projects include: (1) the extension of Bay Area Rapid Transit to Warm Springs, San Jose and Santa Clara, (2) the extension of light rail projects in San Jose, and (3) the development of a future High Speed Train System.

Integration with Other Rail Improvements

The proposed project will require the construction of three supply substations and eight paralleling stations to support the power distribution system for electrification. The EA identifies that the proposed project will accommodate a future high speed train system; however, it does not describe how power facilities required for the proposed project will be constructed to accommodate energy source requirements for a high speed train system. In addition, the EA does not describe how construction of the Caltrain Electrification Program will be integrated with other rail improvements, including construction of the "Baby Bullet" express trains and pedestrian and bicycle access improvements.

Recommendations:

Clarify how the facilities constructed for the Caltrain Electrification Program will be designed to accommodate power distribution requirements for a future high speed train system. Address how the proposed project will be integrated with the construction and operation of the "Baby Bullet" express service and pedestrian and bicycle access improvements.

Invasive Species

The proposed project may include impacts to vegetation within the existing right-of-way and mitigation is proposed as a result of ground disturbance and tree removal. Executive Order 13112 on Invasive Species calls for the restoration of native plant and tree species.

Recommendation:

To the extent that this project will entail new landscaping and tree replacement, the mitigation measures should describe how the project will meet the requirements of Executive Order 13112 by using native species. Replacement of trees and revegetation should be coordinated with appropriate city and county urban foresters and native species should be utilized where feasible.

Air Quality

The EA provides a thorough description of regional air quality issues and conformity requirements. The proposed project is included in the 2003 Regional Transportation Improvement Program which has been demonstrated to conform to the State Implementation Plan for the Bay Area. No exceedances of state or federal ambient air quality standards are projected for the electrification of Caltrain. As of April 30, 2004, the Bay Area is a designated nonattainment area for the federal 8-hour ozone standard (Federal Register, April 30, 2004).

Recommendations:

Correct Page 3.23 and Table 3.3-1 to disclose that the Bay Area is designated as nonattainment for the federal 8-hour ozone standard. Include a discussion of the new 8-hour standard and how this project is affected by future requirements related to the transportation conformity rule.

Mitigation Commitments

Appendix A: Environmental Checklist Form (p. A-1 through A-11) indicates that no environmental issues require mitigation to be incorporated in order to achieve less than significant impacts. However, Section 5.2 states that with the mitigation measures identified in Chapters 3 and 4 of the document, no unavoidable significant impacts would result from the proposed project. It should be clear what measures must be incorporated into the proposed project construction and operation, rather than presented as potential mitigation measures, in order to issue a Finding of No Significant Impact for the proposed project pursuant to NEPA (Council on Environmental Quality 40 Most Asked Questions, #39 and #40, Federal Register Vol. 46, Number 55).

Recommendation:

Clarify which mitigation measures included in Chapter 3 and 4 will be incorporated into the proposed project design such that the project will have no significant impacts. Provide a timeline indicating when implementation of measures incorporated into the project design and additional mitigation measures are expected to occur.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

May 26, 2004

Mr. Erik Olafsson, Senior Planner
Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
PO Box 3006
San Carlos, California 94070-1306

Dear Mr. Olafsson:

Thank you for sending us a copy of the Environmental Assessment/Draft Environmental Impact Report for the Caltrain Electrification Program. We understand that this project would convert Caltrain from diesel-hauled trains and would install some 180 to 200 single track miles of overhead contact system and approximately 13 traction power station facilities for the distribution of electrical power to the electric rolling stock. We are responding on behalf of the Department of Health and Human Services (DHHS), U.S. Public Health Service.

We have reviewed this document for potential health and safety impacts on human populations and we believe that these impacts were adequately addressed. We believe the project will result in positive health benefits and improved transportation patterns within the area.

Sincerely yours,

Paul Joe

Paul Joe, DO, MPH
Medical Officer
National Center for Environmental Health (F16)
Centers for Disease Control & Prevention

II State Agencies

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Jan Boel
Acting Director

May 26, 2004

RECEIVED MAY 28 2004 AM10:25

Erik Olafsson
Peninsula Commute Joint Powers Board
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1306

Subject: Caltrain Electrification Program
SCH#: 2000082093

Dear Erik Olafsson:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on May 25, 2004, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2000082093
Project Title Caltrain Electrification Program
Lead Agency Peninsula Corridor Joint Powers Board

Type EIR Draft EIR

Description The Peninsula Corridor Joint Powers Board proposes to convert the Peninsula Commute Service (Caltrain) from diesel-hauled to electric-hauled trains and install some 180 to 200 single-track miles of overhead contact system and approximately 13 traction power stations facilities for the destruction of electrical power to the electric rolling stock consisting of electric locomotives or electric multiple units. The purposes of this project are to improve Caltrain performance, reduce noise, improve regional air quality, and modernize Caltrain. Increase in Caltrain ridership, reductions in automobile congestion on parallel routes, reductions in energy consumption, reductions in train noise, and improvements in regional air quality are expected to result. Impacts include minor loss of land currently in agriculture use, the potential for encountering hazardous wastes, noise impacts of traction power stations, visual changes, and impacts during construction. Proposed mitigation measures include notification and approvals as required by Williamson Act, traction power station enclosures and adjustments to ventilation system, use of on-track construction approach for archeologically sensitive areas, avoidance of habitat areas, coordination with utility providers and advance notice to customers, a Worker Health and Safety Plan and management practices during construction.

Lead Agency Contact

Name Erik Olaifsson
Agency Peninsula Commute Joint Powers Board
Phone 650 508-6368 **Fax**
email
Address 1250 San Carlos Avenue
P.O. Box 3006
City San Carlos **State** CA **Zip** 94070-1306

Project Location

County San Francisco, San Mateo, Santa Clara
City
Region
Cross Streets
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways 82, 92, 85, 17, 87
Airports San Francisco
Railways UPRR
Waterways South Lomita Canal, Easton, Sanchez, Cherry Creeks, Canyon Seal Slough Tributary B
Schools Burlingame HS, Central HS, Bellarmine College Prep HS
Land Use Transportation

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Landuse; Cumulative Effects; Other issues

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Game, Region 3; Office of Historic Preservation; Department of Parks and Recreation; San Francisco Bay Conservation and Development Commission; Department of Water Resources; California Highway Patrol; Caltrans, District 4; Air Resources Board, Transportation Projects; Regional Water Quality Control Board, Region 2; California Energy Commission; Public Utilities Commission; State Lands Commission;

Note: Blanks in data fields result from insufficient information provided by lead agency.

Document Details Report
State Clearinghouse Data Base

Department of Toxic Substances Control

Date Received 03/24/2004 ***Start of Review*** 03/24/2004 ***End of Review*** 05/25/2004

Note: Blanks in data fields result from insufficient information provided by lead agency.

State of California THE RESOURCES AGENCY OF CALIFORNIA

Memorandum

To: Project Coordinator, Resources Agency Date: May 14, 2004

From: Mr. Erik Ólafsson, Senior Planner
San Mateo County Transit District
P.O. Box 3006
San Carlos, CA 94070-1306

From: Dennis J. O'Bryant
Acting Assistant Director, Division of Land Resource Protection

Subject: Caltrain Electrification Program Environmental Assessment/Draft Environmental Impact Report (EA/DEIR) **SCH#2000082093**

The Department of Conservation's Division of Land Resource Protection (Division) monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. The Division has reviewed the above EA/DEIR and offers the following comments.

The project addresses the possible conversion of Caltrain from a diesel-hauled to an electric-hauled mode. Electrification would involve 180-200 single-track miles for an overhead contact system and 13 traction power station facilities. Alternatives for location of one particular substation (ATF-3 and ATF-3 (Alternate)) would result in the loss of .53-acre farmland and possible public acquisition of .53-acre of land under active Williamson Act contract.

The EA/DEIR provides a brief description of the Williamson Act and notes that public acquisition would require that the Director of the Department of Conservation and the Santa Clara County Planning Department be notified. The EA/DEIR also notes that public acquisition of contracted lands requires that the project proponent demonstrate that there is no other noncontracted land on which it is reasonably feasible to locate the public improvements.

The Williamson Act also includes state policy for locating public improvements on lands in agricultural preserves and especially under Williamson Act contract. The Final EIR (FEIR) should supplement the Williamson Act discussion with the following state policies regarding public acquisition and locating public improvements on lands in agricultural preserves and on lands under Williamson Act contracts. (See Government Code §51290-51295, attached, for further details.) The FEIR should also discuss any specific findings that apply and support the location of public facilities on contracted lands.

- State policy to avoid location of any federal, state, or local public improvements and any improvements of public utilities, and the acquisition of land, in agricultural preserves.
- State policy to locate public improvements that are within agricultural preserves on land other than land under Williamson Act contract
- State policy that any agency or entity proposing to locate such an improvement, in considering the relative costs of parcels of land and the development of improvements, give consideration to the value to the public of land, particularly prime agricultural land, within an agricultural preserve.

Thank you for the opportunity to comment on the EA/DEIR. If you have questions on our comments, or require technical assistance or information on agricultural land conservation, please contact the Division at 801 K Street, MS 18-01, Sacramento, California 95814; or phone (916) 324-0850.

Public Acquisitions of Lands Under Williamson Act Contract
Government Code Section 51290 to 51295

51290. (a) It is the policy of the state to avoid, whenever practicable, the location of any federal, state, or local public improvements and any improvements of public utilities, and the acquisition of land therefor, in agricultural preserves.

(b) It is further the policy of the state that whenever it is necessary to locate such an improvement within an agricultural preserve, the improvement shall, whenever practicable, be located upon land other than land under a contract pursuant to this chapter.

(c) It is further the policy of the state that any agency or entity proposing to locate such an improvement shall, in considering the relative costs of parcels of land and the development of improvements, give consideration to the value to the public, as indicated in Article 2 (commencing with Section 51220), of land, and particularly prime agricultural land, within an agricultural preserve.

51290.5. As used in this chapter, "public improvement" means facilities or interests in real property, including easements, rights-of-way, and interests in fee title, owned by a public agency or person, as defined in subdivision (a) of Section 51291.

51291. (a) As used in this section and Sections 51292 and 51295, (1) "public agency" means any department or agency of the United States or the state, and any county, city, school district, or other local public district, agency, or entity, and (2) "person" means any person authorized to acquire property by eminent domain.

(b) Except as provided in Section 51291.5, whenever it appears that land within an agricultural preserve may be required by a public agency or person for a public use, the public agency or person shall advise the Director of Conservation and the local governing body responsible for the administration of the preserve of its intention to consider the location of a public improvement within the preserve.

In accordance with Section 51290, the notice shall include an explanation of the preliminary consideration of Section 51292, and give a general description, in text or by diagram, of the agricultural preserve land proposed for acquisition, and a copy of any applicable contract created under this chapter. The Director of Conservation shall forward to the Secretary of Food and Agriculture, a copy of any material received from the public agency or person relating to the proposed acquisition.

Within 30 days thereafter, the Director of Conservation and the local governing body shall forward to the appropriate public agency or person concerned their comments with respect to the effect of the location of the public improvement on the land within the agricultural preserve and those comments shall be considered by the public agency or person. In preparing those comments, the Director of Conservation shall consider issues related to agricultural land use, including, but not limited to, matters related to the effects of the proposal on the conversion of adjacent or nearby agricultural land to nonagricultural uses, and shall consult with, and incorporate the comments of, the Secretary of Food and Agriculture on any other matters related to agricultural operations. The failure by any person or public agency, other than a state agency, to comply with the requirements of this section shall be admissible in evidence in any litigation for the acquisition of that land or involving the allocation of funds or the construction of the public improvement. This subdivision does not apply to the erection, construction, alteration, or maintenance of gas, electric, piped subterranean water or wastewater, or communication utility facilities within an agricultural

preserve if that preserve was established after the submission of the location of those facilities to the city or county for review or approval.

(c) When land in an agricultural preserve is acquired by a public entity, the public entity shall notify the Director of Conservation within 10 working days. The notice shall include a general explanation of the decision and the findings made pursuant to Section 51292. If different from that previously provided pursuant to subdivision (b), the notice shall also include a general description, in text or by diagram, of the agricultural preserve land acquired and a copy of any applicable contract created under this chapter.

(d) If, after giving the notice required under subdivisions (b) and (c) and before the project is completed within an agricultural preserve, the public agency or person proposes any significant change in the public improvement, it shall give notice of the changes to the Director of Conservation and the local governing body responsible for the administration of the preserve. Within 30 days thereafter, the Director of Conservation and the local governing body may forward to the public agency or person their comments with respect to the effect of the change to the public improvement on the land within the preserve and the compliance of the changed public improvements with this article. Those comments shall be considered by the public agency or person, if available within the time limits set by this subdivision.

(e) Any action or proceeding regarding notices or findings required by this article filed by the Director of Conservation or the local governing body administering the agricultural preserve shall be governed by Section 51294.

51291.5. The notice requirements of subdivision (b) of Section 51291 shall not apply to the acquisition of land for the erection, construction, or alteration of gas, electric, piped subterranean water or wastewater, or communication facilities.

51292. No public agency or person shall locate a public improvement within an agricultural preserve unless the following findings are made:

(a) The location is not based primarily on a consideration of the lower cost of acquiring land in an agricultural preserve.

(b) If the land is agricultural land covered under a contract pursuant to this chapter for any public improvement, that there is no other land within or outside the preserve on which it is reasonably feasible to locate the public improvement.

51293. Section 51292 shall not apply to:

(a) The location or construction of improvements where the board or council administering the agricultural preserve approves or agrees to the location thereof, except when the acquiring agency and administering agency are the same entity.

(b) The acquisition of easements within a preserve by the board or council administering the preserve.

(c) The location or construction of any public utility improvement which has been approved by the Public Utilities Commission.

(d) The acquisition of either (1) temporary construction easements for public utility improvements, or (2) an interest in real property for underground public utility improvements. This subdivision shall apply only where the surface of the land subject to the acquisition is returned to the condition and use that immediately predated the construction of the public improvement, and when the construction of the public utility improvement will not significantly impair agricultural use of the affected contracted parcel or parcels.

(e) The location or construction of the following types of improvements, which are hereby determined to be compatible with or to enhance land within an agricultural preserve:

(1) Flood control works, including channel rectification and alteration.
(2) Public works required for fish and wildlife enhancement and preservation.
(3) Improvements for the primary benefit of the lands within the preserve.

(f) Improvements for which the site or route has been specified by the Legislature in a manner that makes it impossible to avoid the acquisition of land under contract.

(g) All state highways on routes as described in Sections 301 to 622, inclusive, of the Streets and Highways Code, as those sections read on October 1, 1965.

(h) All facilities which are part of the State Water Facilities as described in subdivision (d) of Section 12934 of the Water Code, except facilities under paragraph (6) of subdivision (d) of that section.

(i) Land upon which condemnation proceedings have been commenced prior to October 1, 1965.

(j) The acquisition of a fee interest or conservation easement for a term of at least 10 years, in order to restrict the land to agricultural or open space uses as defined by subdivisions (b) and (o) of Section 51201.

51293.1. Any public agency or person requiring land in an agricultural preserve for a use which has been determined by a city or county to be a "compatible use" pursuant to subdivision (e) of Section 51201 in that agricultural preserve shall not be excused from the provisions of subdivision (b) of Section 51291 if the agricultural preserve was established before the location of the improvement of a public utility was submitted to the city, county, or Public Utilities Commission for agreement or approval and that compatible use shall not come within the provisions of Section 51293 unless the location of the improvement is approved or agreed to pursuant to subdivision (a) of Section 51293 or the compatible use is listed in Section 51293.

51294. Section 51292 shall be enforceable only by mandamus proceedings by the local governing body administering the agricultural preserve or the Director of Conservation. However, as applied to condemnors whose determination of necessity is not conclusive by statute, evidence as to the compliance of the condemnor with Section 51292 shall be admissible on motion of any of the parties in any action otherwise authorized to be brought by the landowner or in any action against the landowner.

51294.1. After 30 days have elapsed following its action, pursuant to subdivision (b) of Section 51291, advising the Director of Conservation and the local governing body of a county or city administering an agricultural preserve of its intention to consider the location of a public improvement within such agricultural preserve, a public agency proposing to acquire land within an agricultural preserve for water transmission facilities which will extend into more than one county, may file the proposed route of the facilities with each county or city administering an agricultural preserve into which the facilities will extend and request each county or city to approve or agree to the location of the facilities or the acquisition of the land therefor. Upon approval or agreement, the provisions of Section 51292 shall not apply to the location of the proposed water transmission facility or the acquisition of land therefor in any county or city which has approved or agreed to the location or acquisition.

51294.2. If any local governing body administering an agricultural preserve within 90 days after receiving a request pursuant to Section 51294.1 has not approved or agreed to the location of water transmission facilities as provided in Section 51294.1 or in subdivision (a) of Section 51293, the public agency making such request may file an action against such local governing body in the superior court of one of the counties within which any such body has failed to approve the location of facilities or the acquisition of land therefor, to determine whether the public agency proposing

the location or acquisition has complied with the requirements of Section 51292. If the court should so determine, the provisions of Section 51292 shall not apply to the location of water transmission facilities, nor the acquisition of land therefor, in any of the counties into which they shall extend, and no writ of mandamus shall be issued in relation thereto pursuant to Section 51294. For the purposes of this section, the county selected for commencing such action is the proper county for the trial of such proceedings. In determining whether the public agency has complied with the requirements of Section 51292, the court shall consider the alignment, functioning and operation of the entire transmission facility.

Courts shall give any action brought under the provisions of this section preference over all other civil actions therein, to the end that such actions shall be quickly heard and determined.

51295. When any action in eminent domain for the condemnation of the fee title of an entire parcel of land subject to a contract is filed, or when that land is acquired in lieu of eminent domain for a public improvement by a public agency or person, or whenever there is any such action or acquisition by the federal government or any person, instrumentality, or agency acting under the authority or power of the federal government, the contract shall be deemed null and void as to the land actually being condemned, or so acquired as of the date the action is filed, and for the purposes of establishing the value of the land, the contract shall be deemed never to have existed.

Upon the termination of the proceeding, the contract shall be null and void for all land actually taken or acquired.

When an action to condemn or acquire less than all of a parcel of land subject to a contract is commenced, the contract shall be deemed null and void as to the land actually condemned or acquired and shall be disregarded in the valuation process only as to the land actually being taken, unless the remaining land subject to contract will be adversely affected by the condemnation, in which case the value of that damage shall be computed without regard to the contract.

When an action to condemn or acquire an interest that is less than the fee title of an entire parcel or any portion thereof of land subject to a contract is commenced, the contract shall be deemed null and void as to that interest and, for the purpose of establishing the value of only that interest, shall be deemed never to have existed, unless the remaining interests in any of the land subject to the contract will be adversely affected, in which case the value of that damage shall be computed without regard to the contract. The land actually taken shall be removed from the contract. Under no circumstances shall land be removed that is not actually taken for a public improvement, except that when only a portion of the land or less than a fee interest in the land is taken or acquired, the contract may be canceled with respect to the remaining portion or interest upon petition of either party and pursuant to the provisions of Article 5 (commencing with Section 51280).

For the purposes of this section, a finding by the board or council that no authorized use may be made of the land if the contract is continued on the remaining portion or interest in the land, may satisfy the requirements of subdivision (a) of Section 51282.

If, after acquisition, the acquiring public agency determines that it will not for any reason actually locate on that land or any part thereof, the public improvement for which the land was acquired, before returning the land to private ownership, the public agency shall give written notice to the Director of Conservation and the local governing body responsible for the administration of the preserve, and the land shall be reenrolled in a new contract or encumbered by an enforceable deed restriction with terms at least as restrictive as those provided by this chapter. The duration of the restriction shall be determined by subtracting the length of time the land was held by the acquiring public agency or person from the number of years that remained on the original contract at the time of acquisition.

Terry Tamminen
Agency Secretary
Cal/EPA

Department of Toxic Substances Control

Edwin F. Lowry, Director
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Arnold Schwarzenegger
Governor

April 9, 2004

Mr. Erik Ólafsson, Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, California 94070-1306

Dear Mr. Ólafsson:

Thank you for the opportunity to comment on the Environmental Assessment/Draft Environmental Impact Report (EA/DEIR) for the Caltrain Electrification Program [SCH not provided]. As you may be aware, the California Department of Toxic Substances Control (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code, Division 20, Chapter 6.8. As a Responsible Agency, DTSC is submitting comments to ensure that the environmental documentation prepared for this project to address the California Environmental Quality Act (CEQA) adequately addresses any required remediation activities which may be required to address any hazardous substances release.

DTSC has reviewed the EA/DEIR and has the following comments:

1. Table 1.5-1 (Permits and Approval Anticipated to be Required): This table indicates that several permits and approvals will be required from various agencies as part of the construction project. However, the table does not state what agency(ies) will be involved in approving activities associated with the remediation and management of hazardous substances that are anticipated to be present along the project corridor.

2. Table 3.7-1 (Known Hazardous Waste Sites with Potential to Affect Proposed Traction Power Substation Sites): This table includes both the Tuntex Bayshore Rail Yard and Schlage Lock Company sites that are currently under DTSC oversight. The table should be updated to include that both sites participated in a regional groundwater study.

3. Page 3-67, Section 3.7.4: This section contains mitigation measures for sites identified as ATF-1A and ATF-2A. The mitigation measures are described as collecting samples from soil piles to determine the contents and appropriate disposal options from site ATF-1A, and to identify the contents of drums and stored materials at site ATF-2A. DTSC strongly recommends that the sampling be conducted

immediately so that the soil and drum contents may be characterized. We are also requesting that the sampling information be forwarded to DTSC as well as the site address, name of generator, and name of property owner.

4. Page 3-69, second bullet: DTSC recommends that the term "hazardous wastes" be replaced with the term "hazardous substances" in this section and other appropriate sections in this document. The term hazardous substances would include contaminants that may not be a hazardous waste, but may be of concern for human and environmental health and safety. DTSC also suggests that the Risk Assessment document be limited to an evaluation of the potential risks posed by the chemicals present at the site. The appropriate remedial measures, remediation goals, and implementation methods should be included in a remedial decision document. This document should then be reviewed and approved by the appropriate regulatory agency. The remedial measures also need to be addressed as part of this document. For example, if the remediation activities include the need for soil excavation, the CEQA document should include: (1) an assessment of air impacts and health impacts associated with the excavation activities; (2) identification of any applicable local standards which may be exceeded by the excavation activities, including dust levels and noise; (3) transportation impacts from the removal or remedial activities; and (4) risk of upset should be there an accident at the Site. Either these measures should be incorporated into this document, or a statement added that a supplemental EIR or other CEQA document will be prepared.

5. Page 4-11, Section 4.2.5.2, Mitigation, Hazardous Wastes: Paragraph 3 and 5 of this section states that contaminated soil can be excavated and stockpiled at a centralized location, and subsequently sampled and analyzed for disposal profiling. If the soil is found to be a hazardous waste, and the stockpile is not located at the generation point, the generator of the waste may be in violation of hazardous waste transportation and storage requirements. Prior to implementing this mitigation measure, DTSC's Hazardous Waste Management Program should be contacted to determine whether a hazardous waste permit or variance from permitting requirements is required. In addition, a document such as a Soil Management Plan that describes the soil management measures (e.g., excavation, stockpiling, dust control, etc.) that will be used on the project will need to be prepared, reviewed and approved by an appropriate regulatory agency.

6. Page 4-12: Workers that may come into contact with hazardous substances at the site as well as the Health and Safety Plan are required to meet the provisions of California Code of Regulations, Title 22, section 5192.

DTSC can assist your agency in overseeing characterization and cleanup activities through our Voluntary Cleanup Program. A fact sheet describing this program is enclosed. We are aware that projects such as this one are typically on a compressed schedule, and in an effort to use the available review time efficiently, we request that

DTSC be included in any meetings where issues relevant to our statutory authority are discussed.

Please contact Lynn Nakashima of my staff at (510) 540-3830 if you have any questions or would like to schedule a meeting. Thank you in advance for your cooperation in this matter.

Sincerely,

Barbara J. Cook, P.E., Chief
Northern California - Coastal Cleanup
Operations Branch

Enclosures

cc: without enclosures

Governor's Office of Planning and Research
State Clearinghouse
P. O. Box 3044
Sacramento, CA 95812-3044

Guenther Moskat
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

DEPARTMENT OF TRANSPORTATION
111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5513
TTY (800) 735-2929

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April 2, 2004

SF000020
SCH 2000082093

Mr. Erik Olafsson
Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
San Carlos, CA 94070-1306

Dear Mr. Olafsson:

Caltrain Electrification Program – Draft Environmental Impact Report (DEIR)

Thank you for including the California Department of Transportation (Department) in the environmental review process for the proposed project. The DEIR indicates the construction of over-bridge barriers on State roadways. Any work within the State right-of-way (ROW) will require an approved traffic control plan and an encroachment permit. To apply the applicant must submit a completed encroachment permit application, environmental documentation, and five (5) sets of plans (in metric units), clearly indicating State ROW, to the following address:

Mr. Sean Nozzari, District Office Chief
Office of Permits
California Department of Transportation, District 04
P. O. Box 23660
Oakland, Ca 94623-0660

Should you require further information or have any questions regarding this letter, please call Tom Holley, of my staff at (510) 622-8706.

Sincerely,

Timothy C. Sable

TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Scott Morgan (State Clearinghouse)

BOB BALGENORTH, Chair
JOSEPH TAVAGLIONE, Vice Chair
JAMES C. GHIELMETTI
JEREMIAH F. HALLISEY
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STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER
GOVERNOR

CALIFORNIA TRANSPORTATION COMMISSION

1120 N STREET, MS-52
P. O. BOX 942873
SACRAMENTO, 94273-0001
FAX (916) 653-2134
(916) 654-4245
http://www.catc.ca.gov

June 2, 2004

Mr. Erik Olafsson
San Mateo County Transit District
Peninsula Corridor Joint Powers Board
P.O. Box 3006
San Carlos, CA 94070-1306

RE: Caltrain Electrification Program

Dear Mr. Olafsson:

At its May 2004 meeting the California Transportation Commission, as a responsible agency, reviewed the Draft Environmental Impact Report/Environmental Assessment (EIR) for the Caltrain Electrification Program.

According to the draft EIR, the Electrification Program alternative option 1 would be fully funded at $602 million. The other options discussed under the Electrification Program alternative would require an additional $29 to $411 million to fully fund them. The Commission requests that the Joint Powers Board identify the specific funding source(s) and the level of certainty that those revenues would be available to fund the other options should one of those options be selected as the preferred option.

If you have questions, please call Robert Chung, CTC Deputy Director at 916-654-4245.

Sincerely,

Bob Balgenorth

BOB BALGENORTH
Chair

cc: Commissioners
Robert Chung, CTC staff

Carolp/win6/chung/JPB2004 ElectrifEIRLtr

III Regional Agencies

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

May 25, 2004

Erik Olafsson
Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1306

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ALAMEDA COUNTY
Roberta Cooper
Scott Haggerty
(Chairperson)
Nate Miley
Shelia Young

CONTRA COSTA COUNTY
Mark DeSaulnier
Mark Ross
Gayle Uilkema
(Secretary)

MARIN COUNTY
Harold C. Brown, Jr.

NAPA COUNTY
Brad Wagenknecht

SAN FRANCISCO COUNTY
Chris Daly
Jake McGoldrick
Vacant

SAN MATEO COUNTY
Jerry Hill
Marland Townsend
(Vice-Chairperson)

SANTA CLARA COUNTY
Erin Garner
Liz Kniss
Patrick Kwok
Julia Miller

SOLANO COUNTY
John F. Silva

SONOMA COUNTY
Tim Smith
Pamela Torliatt

Jack P. Broadbent
EXECUTIVE OFFICER/APCO

Subject: Caltrain Electrification Program

Dear Mr. Olafsson:

Bay Area Air Quality Management District (District) staff have received the Environmental Assessment/Draft Environmental Impact Report (EA/DEIR) for the proposed Caltrain Electrication Program. The proposed project would convert Caltrain from diesel-hauled to electric-hauled trains and would install between 180-200 single-track miles of overhead contact system and approximately 13 traction power station facilities on the 77-mile Caltrain corridor from San Francisco to Gilroy.

The Bay Area is currently a non-attainment area for national and state ambient air quality standards for ground level ozone and state standards for particulate matter. Since motor vehicles constitute the largest source of air pollution in the Bay Area, the District has a strong interest in promoting alternative modes of transportation. Because the Caltrain Electrification Program is such a substantial transportation investment, it is essential that the project be planned and operated to maximize its public benefits, including air quality benefits. We have reviewed the EA/DEIR, and we are providing comments on the air quality aspects of the proposed project.

We support the SamTrans/Peninsula Joint Powers Board's goals for the project, especially the objective to improve regional air quality (Summary Purpose and Need, p. S-1). We agree that an electrified Caltrain system will have multiple air quality benefits including: 1) much lower air pollution emissions from train propulsion compared to existing diesel locomotives; and 2) an improved, more efficient Caltrain system that will result in increased transit ridership in the corridor, thereby reducing automobile trips and emissions. Therefore, we are highly supportive of this project and encourage your agency to begin implementation as soon as practicably possible.

The EA/DEIR project description discusses three rolling stock options for the Caltrain Electrification Program, but the document does not identify which is the preferred alternative. Based on our understanding of current electrified rail technology, electric multiple units (EMU's) are the most energy efficient, resulting in the least air quality impacts. We recommend that the Final EIR include a

comparison of the emissions from the different rolling stock alternatives as part of the air quality impacts analysis. We recommend that maximizing emission reductions be a primary consideration in selecting rolling stock.

We understand that the Caltrain Electrification Program is a separate project from the proposed Transbay Terminal/Caltrain Extension and the California High Speed Rail projects. However, we urge your agency to continue coordinating the Caltrain Electrification Program with these related major transportation projects to ensure compatible infrastructure throughout the corridor.

The EA/DEIR indicates that the entire Caltrain right-of-way is an area with a high probability of encountering hazardous materials (p. 3-67). If new rail infrastructure along this corridor (including the construction of the 13 traction power station facilities) could result in people's exposure to hazardous materials such as asbestos, lead-based paint and/or contaminated soil, then the Final EIR should address those potential air quality impacts and propose appropriate mitigation measures. Demolition activity, soil remediation, and the storage and handling of fuels and solvents require careful mitigation planning and may require prior approval and/or a permit from the District. For more information on District regulations regarding these activities, please contact our Compliance and Enforcement Division at (415) 749-4795.

If you have any questions regarding these comments, please contact Suzanne Bourguignon, Environmental Planner, at (415) 749-5093.

Sincerely,

Jack P. Broadbent
Executive Officer/APCO

JPB:SB

cc.

BAAQMD Director Chris Daly
BAAQMD Director Erin Garner
BAAQMD Director Jerry Hill
BAAQMD Director Liz Kniss
BAAQMD Director Patrick Kwok
BAAQMD Director Jake McGoldrick
BAAQMD Director Julia Miller
BAAQMD Director Marland Townsend

-----Original Message----
From: Bob Bates [mailto:bbates@mtc.ca.gov]
Sent: Tuesday, May 25, 2004 4:35 PM
To: Electrification
Subject: Electrification EA/DEIR Comments

May 25, 2004

Eric Olafsson
Senior Planner
San Mateo County Transit District

Dear Eric:

The MTC staff has reviewed the Caltrain Electrification Program Environmental Assessment/ Draft Environmental Impact Report (EA/DEIR) for the electrification of the Caltrain line from its northern boundary in San Francisco to its southern terminus in Gilroy.

Our comments encompass the Project Description and Environmental Settings and Consequences chapters. Thank you for the opportunity to allow MTC to comment on the content of the environmental document for the proposed project.

Project Description

The comments listed below focus on the Cost, Funding, and Feasibility section of the Chapter 3.

Please specify the amount, if any, included in the capital cost for contingencies (Table 2.3-5).

Please reconcile the discrepancy between Table 2.3-6, which lists five existing diesel locomotives as being retained for emergency use and other areas in the EA/DEIR that identify these same diesel locomotives as being available for Dumbarton and Salinas rail service.

The operating cost for Base and Express service for 2008 is listed incorrectly in Table 2.3-9.

Section 2.3.3.1 states that the capital costs are in constant 2003 dollars and are net of the estimated revenues from the sale of surplus equipment. Table 2.3-7, conversely, shows the sale of excess diesel locomotives as being part of the funding plan. Please reconcile this difference.

Please provide backup data to support the assertion in Section 2.3.3.3 that there would be operating cost savings for San Francisco Muni and SamTrans associated with the level of service for Caltrain under both the Electrification Program Alternative and No-Electrification Alternative.

Environmental Settings and Consequences

The focus of our comments below is on the air quality elements and the land use components of the EA/DEIR.

In Section 3.1, Land Use and Planning, there is no mention of opportunities for development at or near Caltrain stations. While this project may have negative impacts on some properties, it also presents opportunities at the twenty-six of Caltrain's stations affected by this project. MTC, through its transit expansion policy and program as well as the recently adopted "Transportation and Land Use Platform" clarifies that new public transit projects will be evaluated in part based on local supportive land use policies that can be proven to increase ridership and thus maximize the cost-effectiveness of the project. Specifically, it states the following goals:

- "Promote development of land uses adjacent to major transit extensions, to support ridership markets that will make these investments economically feasible.

- "Condition the award of regional discretionary funds under MTC's control for Resolution 3434 expansion projects, on the demonstration by local government that plans are in place supporting some level of increased housing/ employment/mixed use density around transit stations/transfer centers."

In light of these adopted regional policies, please expand upon the land use chapter when you produce the FEIS with quantification of employment and residential development densities around stations and opportunities for additional development.

Section 3.15 indicates that ridership will double on Caltrain over the next 15-20 years. However, there is no discussion of the impact this will have on how riders access the station. Table 3.15-7 indicates that parking supply in 2020 will be oversubscribed by over 3,000 spots corridor-wide. Section 3.15.4 notes that at many locations bicycle lockers are fully rented with waiting lists. While section 3.15.5.6 notes that linked transit trips will increase in the corridor, it is important to note that accessing busy stations with local transit will be critical, as will the provision of access to stations for non-motorized travelers.

Please provide supporting information to verify the statement in Section 3.3.2.1 that 90 percent of the electrical power consumed in the JPB Corridor is imported.

Please clarify the meaning of the following statement in Section 3.3.2.2, "Should ambient air quality already exceed existing standards, the BAAQMD has established threshold criteria to account for the continued degradation of regional air quality."

The reference to the 2000 Ozone Attainment Plan should be corrected to the 2001 Ozone Attainment Plan (Section 3.3.2.3). In addition, MTC approved the conformity analysis in March 2002 (Section 3.3.3).

If you have any questions about the comments provided above, please feel free to call me at 510.464.7735.

Sincerely,

Bob Bates
Caltrain Liaison

IV Local Agencies

DOC MT MAY 25 '04 AM 11:55

Town of Atherton

91 Ashfield Road
Atherton, California 94027
650-752-0500
Fax 650-688-6528

May 20, 2004

Erik Olafsson, Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1306

Subject: Comments on Electrification EA/EIR

Dear Mr. Olafsson:

The Town of Atherton has reviewed the Draft EA/EIR for the Caltrain Electrification Program. Our staff, our Caltrain Subcommittee and our City Council have the following comments:

Heritage or significant trees

Page 3-17 states that no adverse impacts are anticipated to heritage or significant trees. However, Page 3-36, in section 3.4.1.4 states that some trees and nature screening may encroach into vertical and horizontal clearances for installation and safe operation of electrical wires. Section 3.4.2.2 states that a certified arborist assessed the corridor, that overhanging branches would need to be trimmed, and further states that this information would be available to assist property owners to comply with PUC requirements.

These PUC requirements only come into effect because of the construction of this project; therefore the impacts of these requirements are impacts of this project and should be identified in detail. **The specific clearance requirements and the distance that the trees would need to be removed needs to be shown in the document.** Failure to identify these critical clearances is a major oversight. In addition, according to a comment made by Caltrain staff, the corridor is intended to be upgraded to four tracks, but this track section is not mentioned in the EA/EIR. The more significant impacts of a wider track section on tree clearances needs to be disclosed in the EA/EIR.

There are a considerable number of mature and heritage trees along the corridor, especially in the Town of Atherton, that will be impacted by the project. **The project needs to identify these impacts.** We were very surprised to learn, essentially by accident, that a Tree Survey and Assessment Report had been prepared which details the impact upon trees in Atherton It was only because of an inadvertent disclosure that we were able to hear of, and to obtain a copy of, this Report. **The Report should be included as an integral part of the EA/EIR.** The impact to trees also relates to the visual impact. The visual impact section states that existing screening will minimize the impact. But the tree section states that some of the screening trees will need to be removed. **This is a contradiction and creates a significant impact that must be addressed.**

The Town of Atherton has a tree protection ordinance and permit requirements for removal of trees. Table 1.5-1 incorrectly states "No permitting requirements identified" for the Town of Atherton. The Environmental Checklist, page A-3, under item IV (e), regarding conflict with local policies or ordinances shows "No Impact." However, the project arborist consulted with the Town Arborist and determined that permits would be required for removal or extensive pruning of heritage trees, and that removal or extensive pruning (greater than 25%) of heritage trees conflicts with Atherton tree protection policies. A considerable number of the trees shown to be removed are heritage trees, and some of them are heritage oak trees, a species of special concern in Atherton and along the corridor.

On page 3-36, Section 3.4.1.4 states that "Potential project impacts on such vegetation were therefore considered.", but the significant impact of removal of 80 trees within Atherton, and of 1,727 trees in total, was considered to be "No Impact". It is not possible that the removal of this many trees has "No Impact," especially within the Town of Atherton where 26% of the screening trees are being removed, and a larger undisclosed percentage are being pruned, possibly drastically pruned.

Finally, regarding tree removal and pruning, the DEA/EIR implies on page 3-37 that property owners will be required to remove or prune their trees to comply with PUC requirements, and that the JPB "will coordinate with the property owners if the need arises." This is not an acceptable means to deal with this significant project impact. **When the JPB constructs a project that will impact private trees, many which have been overhanging the tracks for decades, the JPB needs to include in the project all tree work required, and identify this work as a project impact.** The EIR should also address the need for condemnation actions to remove valuable trees on private property, and address the potential for diminution of property values due to removal of screening adjacent to the rail corridor.

Catenary visual impact

Considerable funds have been expended in this Town and in many Cities along the corridor to underground overhead utility wires to rid the cities of the blight created by the

proliferation of overhead wires. Adding these Caltrain electrification wires would be a major step backwards from a visual standpoint.

The EIR shows the appearance of the catenary wires on a number of plates. Figure 3.1-5 shows the Atherton Station area from the parking lot. It does not show any support poles and minimizes the wire impact. The text states that the support poles would be largely obscured by the existing landscaping. It states "There would be only a minor visual effect." However, the view to the corridor from the residences along the corridor, from Holbrook-Palmer Park and from the Town Center complex will be dramatically and significantly impacted by the addition of the poles and wires. The view used for the rendering is not representative of the view from the Town center, and is certainly not representative of the view after extensive vegetation removal.

The document goes on to state that measures to mitigate visual impacts will be incorporated into the project design, but it also states that screening landscaping may need to be removed, and that additional landscaping may not be possible due to safety clearances form the wires. It therefore appears that it is not possible to mitigate the visual impacts of this system. **This impact is therefore significant, and apparently cannot be mitigated to a less than significant level.**

Historic Resources

The addition of poles within 40 feet of the historic Atherton train station, and multiple wires within a few feet of the station would have a direct and adverse impact on the historic train station's site. Note also that 1913 is when the station was restored, but the original station was constructed in 1866. Please see the attached 1913 picture of the Atherton station.

The test is not whether the structure itself must be modified, but whether the site and context of the station is modified. The test is also not whether it is adverse, but whether the adverse impact is significant. **This impact needs to be appropriately addressed, with its significance determined in accordance with standard historical guidelines.**

Public Services

The DEA/EIR makes no mention of the Town of Atherton City Hall complex immediately adjacent to the Caltrain tracks. This complex includes the Police Station, City Hall, Post Office, Library, Permit Center and Public Works Corporation Yard. **Please include these Town of Atherton facilities, and address the impact thereon, in the report.** The report should also address the potential interference of the electrified wires on emergency radio reception from the Atherton Police Dispatch center, and others along the corridor.

Potential Interference with Resident's Electronics

Section 3.17.4 on Electromagnetic Interference (EMI) alludes to the potential for interference with "other electromagnetic systems". It is unclear if these other systems include the various systems in nearby residences, businesses and public offices such as medical equipment, computers, telephone, cellular telephones, television, radios, etc.. **The DEA/EIR needs to discuss the potential for EMI impacts to adjacent properties.** It is especially critical that potential EMI impacts to sensitive installations near the corridor be identified and thoroughly discussed.

The same section states that specialized components may be required for certain systems, but does not call for the installation of these components as mitigation for the EMI impacts. This section is insufficient and needs to be expanded to discuss: a) what features will be incorporated into the electrification system to avoid EMI impacts; and b) what mitigation will be included with the project for EMI impacts to nearby properties and sensitive installations.

Recreational Facilities

The DEA/EIR states that there would be "no proximity impacts on public parks and recreation areas." It is not clear what a proximity impact is, but the poles and wires, and the removal and trimming of screening trees will have a significant impact on Holbrook-Palmer Park, which abuts the Caltrain right of way. **This impact needs to be appropriately addressed.**

Bus Transit

Section 3.15.1, and Table 3.15-1, should note that the Atherton station is served by shuttle buses for several local schools.

Avoidance or Mitigation

The DEA/EIR should address what alternatives have been considered to avoid or mitigate the anticipated significant impacts as noted above and in the report. One alternative that could reduce some of these impacts would be to move the two tracks through Atherton and other communities as close to the center of right of way as possible, such that the required clearances will remove less trees, and reduce the pruning impacts to many others.

Another alternative is to delay electrification until the corridor is grade separated, either by Caltrain or by the High Speed Rail project, then use third rail electrification instead of overhead catenary, avoiding both the visual impact and the tree trimming impacts. It is possible to have trains pick up their power from both overhead and third rail, allowing grade separated portions of the corridor to use third rail, while at-grade portions use catenary. This would mitigate the dual impacts of grade separation and overhead wires,

which could result in poles extending 60 feet high. It would also provide an incentive for at-grade portions to grade separate. Note also that this delay will save significant costs, because not only is the third rail less costly to construct and maintain than the catenary system, but costs to shoofly the electrified system would be considerable.

Please address the above comments in your Final EA/EIR, and advise us of what action you propose to avoid or mitigate the dramatic tree and visual impacts to the Town of Atherton. **If these impacts can be neither avoided nor mitigated, the JPB is required to make a finding of overriding considerations before proceeding with the project.** Thank you for your consideration.

Sincerely,
Town of Atherton

Kathy McKeithen
Mayor

Attachment: 1913 Atherton station picture

S:\Caltrain\ATHERTON - LETTER ON ELECTRIFICATION EIR (JRJ2104).DOC

1913

RCVD MAY 25 '04 AM 8:08

Atherton Tree Committee
91 Ashfield Road
Atherton, California 94027

May 20, 2004

Erik Olafsson
San Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1306

RE: Comments on Electrification EA/EIR

Dear Mr. Olafsson:

The Atherton Tree Committee has reviewed the Draft EA/EIR for the CalTrain Electrification Program and submits the following comments.

Page 3-36, Section 3.41.4 states that there will be "No Impact" from the removal of 80 trees within Atherton, nor would there be an impact from the removal of 1,727 trees for the entire project. We challenge the assessment that the removal of 1,727 trees along the corridor would have "No Impact ", and we challenge the assessment that the removal of 80 trees within the Atherton corridor would have no impact. A significant number of mature trees along the Atherton corridor are mature and include a number of heritage trees. We feel that the removal of eighty trees including a number of mature and/or heritage trees along the Atherton corridor will have a very significant visual impact and a detrimental impact on wildlife habitat, storm water runoff reduction and air quality.

The Town of Atherton has a Heritage Tree Ordinance, Municipal Code 8.10, which requires permits for removals and prohibits "excessive pruning". Table 1.5-1 of the EIR incorrectly states that "No permitting requirements identified" for the Town of Atherton. Our Town Arborist met with the project arborist and determined that any tree over 48 inch circumference would require a permit. Additionally, healthy trees, or when grouping of more than five trees at one time on a

property are being proposed for removal, the removal would be referred to the Atherton Planning Commission for a public hearing. We are also concerned about the extent of the pruning that is being proposed. The arborist survey states the certain trees are to be "pruned", but does not identify how much pruning is required. Pruning more than 25% of a tree's canopy at one time within a calendar year would be considered "excessive pruning" and is in conflict with our tree protection policies.

The draft EA/EIR also states that measures to mitigate the visual impacts will be incorporated into the project design. It also states that screening landscaping may need to be removed, and that additional landscaping may not be possible due to safety clearances from the wires. This appears to be a contradiction and may create a detrimental visual impact for the community of Atherton that may not be satisfactorily mitigated. It would be helpful to understand how the visual impacts of removing landscape screening and adding overhead wires will be mitigated.

Your arborist's survey recommends the removal of all Monterey Pine species "because of the frequent pruning that would be required to maintain the lines in a safe condition, and the resultant damage that would be done to the trees." We feel that these removals may be unwarranted depending on the actual condition of individual trees. Further identification of the trees in question may result in avoiding removal and mitigation proposals should be with these recommendations.

Many of the trees proposed for removal are on private property and the removal could have a significant impact to the residents and their property values. We request that you communicate how these property owners will remunerated for the loss of their trees.

It should be noted that your tree survey failed to identify five properties that border the tracks and the trees in Holbrook-Palmer Park located along the property line that borders the tracks were not addressed in your survey. How many trees, if any, will be proposed for removal in the aforementioned areas?

Please advise us of what action you propose to avoid or mitigate the effect of removing 80 trees from the Atherton community. We understand the benefits train electrification would offer the larger community, and we are prepared to work with you to find mutually satisfactory solutions to the issues raised in this letter.

Sincerely,

Denise Kupperman, Chairperson
Atherton Tree Committee

TOWN OF ATHERTON
91 ASHFIELD ROAD
ATHERTON, CA 94027
(650) 752-0570
FAX (650) 688-6539

telephone transmittal

TO Erik Olafsson FROM Kathy Anderson

COMPANY/ ATTENTION San Mateo Transit District DEPARTMENT Public Works 752-0526

TELEPHONE TELEPHONE (650) 752-0570

FAX 650 508-7938 FAX (650) 688-6539

CC:

SUBJECT

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Per Your Request ☐ Action Needed

Mr. Olafsson,

Please review the comments submitted by the Atherton Tree Committee regarding the Electrification EA/EIR.

Thank you,

Kathy Anderson

# of pages 3 (including this cover page) Date: 5/25/04

/word/faxnew.dot

CITY OF BELMONT

April 7, 2004

Erik Olafsson, Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
San Carlos, CA 94070-1306

Jerome Wiggins, Program Specialist
U. S. Department of Transportation
Federal Transit Admin., Region IX
201 Mission Street, Ste. 2210
San Francisco, CA 94105

RE: Environmental Assessment / Draft Environmental Impact Report
CalTrain Electrification Program

On April 5, 2004, the City of Belmont received a draft Environmental Impact Report for the CalTrain Electrification Program. After reviewing the document, the City has the following comments regarding the report:

Aesthetics – We agree that the statement that the introduction of the poles and wires required by an overhead contact system (OCS) may be considered an adverse visual effect by residents and local business operators (p. 3-1). Further, we support the mitigation measure identified on page 3-17 indicating that the Joint Powers Board

> *"will coordinate with local jurisdictions and neighborhood associations along the right-of-way to develop design guidelines to minimize visual effects. These may include aesthetic measures such as incorporating landscaping into final design, varying pole placement o tapering and painting poles to blend into the surrounding environment."*

Given the positive screening effects enjoyed by Belmont from planting trees in our street medians and side walks, we believe this mitigation must be included as a requirement on the project. Such reference is missing on the mitigation summary chart on page S-10 and we respectfully request that tree plantings be highlighted wherever appropriate in the EIR.

Thank you for the opportunity to comment. Please contact me at City Hall (650-637-2908) should you have any questions.

Very truly yours,

Craig A. Ewing, AICP
Planning and Community Development Director

cc: City Manager
City Attorney

CITY OF BRISBANE

50 Park Place
Brisbane, California 94005-1310
(415) 508-2100
Fax (415) 467-4989

DUL MT MAY20'04 AM 7:00

May 12, 2004

Mr. Erik Olafsson, Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1306

SUBJECT: Environmental Assessment / Draft Environmental Impact Report (EA/EIR) For The Caltrain Electrification Program

Dear Mr. Olafsson,

Thank you for the opportunity to comment on the environmental document for this project. The City Council considered the document at their meeting of May 3, 2004 and directed staff to prepare this letter.

It is clear from the EA/EIR that the project will have a number potentially significant impacts that can, and should, be mitigated. In addition, we note several clearly beneficial impacts from the project including: a reduction in energy consumption, a substantial benefit to air quality, a reduction in noise and, possibly (depending on the rolling stock option chosen), vibration impacts on surrounding homes and a decrease in traffic congestion should the projected increase in Caltrain ridership take place. For these reasons, the City of Brisbane supports the project.

However, we also recognize that the aesthetic impact from the overhead contact system, along such a lengthy corridor, may be somewhat more significant than the document suggests. On the other hand, we acknowledge that this aesthetic impact may be a necessary trade-off for the substantial benefits from the project.

We are also concerned about the level of exposure to EMF radiation that the passengers would experience, notwithstanding the reality that the duration of exposure would be limited to travel time. We urge you to do everything feasible to mitigate this exposure.

Further, the document notes that "the power supply and distribution system will also accommodate the future development of high speed rail." Since high speed rail could have separate and unique impacts from the proposed project, it should be clear that this environmental document should not be considered a substitute for a full disclosure of the impacts associated with a future introduction of high speed rail.

Providing Quality Services

Finally, the City Engineer has pointed out several corrections that should be made to the document. The Bayshore Station is listed as being in CCSF although it has been relocated to the City of Brisbane (page 1-2), that Table 1.5 (page 1-18) should be appended to include a requirement for a Haul Permit (for transport of any spoils in excess of 6 cubic yards on City Streets) and a Traffic Control Permit (if any detours or traffic control) from the City of Brisbane, and that Table 3.16-1 (page 3-137) is incomplete (contact Brisbane DPW for location, size and number of pressurized mains, sewer force mains and gravity storm crossings of the JPB ROW).

Once again thank you for the opportunity to comment. We trust these comments will be helpful and that the final document will reflect our concerns.

Sincerely,

Michael Barnes
Mayor

ENGINEERING DIVISION
701 Laurel Street / Menlo Park, CA 94025-3483
(650) 330-6740 / Fax (650) 327-5497

DUMT MAY26'04 AM 7:52

May 25, 2004

Caltrain Electrification
1250 San Carlos Avenue
San Carlos, CA 94070

Subject: **Caltrain Electrification Program, Environmental Assessment / Draft Environmental Impact Report**

Members of the Peninsula Corridor Joint Powers Board:

Thank you for the opportunity to comment on the Environmental Assessment / Draft Environmental Impact Report on the proposed Caltrain Electrification Program. Menlo Park recognizes that it benefits substantially from Caltrain services and wishes to cooperate with the JPB in improving the quality and efficiency of Caltrain services and operations. However, it must also be recognized that the central portion of Menlo Park is adversely impacted by some of the characteristics of Caltrain operations. As a result, any significant change in Caltrain operations is a matter of considerable public concern. This letter is intended to convey those concerns on behalf of Menlo Park's most directly affected citizens.

After carefully considering the draft document, we believe that there are a number of considerations that must be addressed in more depth before the document would be reasonably adequate for certification.

Our concerns include the following points:

- The project's impact on trees in and near Menlo Park is not sufficiently clear. We understand that there is a detailed arborist's report, but that report has not been directly incorporated in the document. If the content of the arborist's report concerning tree loss in and near Menlo Park is as has been reported in the press (eight to twelve trees at the San Francisquito Creek crossing, fifteen to twenty-two of the fifty-six trees along the tracks in Menlo Park and twenty-five percent of the trees along the tracks in nearby Atherton slated for removal), the DEIR's conclusion of "no permanent impacts" to biological resources may be incorrect. We suggest that this area of the analysis be thoroughly reconsidered, that more specific detail be provided in the report and that consideration be given to transplanting trees rather than removing them. We would also suggest that

planting new trees be given consideration as mitigation for the loss of existing trees.

- Regarding visual impacts, it seems certain that many in Menlo Park will consider the prospect of catenary wires, insulators, support poles and mast arms, portal support frames in the station areas and higher poles and wires for the distribution system unsightly. And because the impacts of tree removal associated with the project have not been clearly documented in the DEIR (see point above), it is evident that the visual impacts are likely to be more extensive than analyzed in the DEIR. To be a fair indicator of likely visual impact, the DEIR needs additional photo-simulated views that combine the effects of introduction of the electrification overhead gear together with those of the project's tree removal effects. Tree planting and other landscape treatments should be considered as mitigation for the visual impacts created by the project.
- The DEIR claims the potential for substantial noise reduction benefit as the result of electrification. However, in areas near grade crossings, any such benefit would be imperceptible because of the continued impacts of the much more disturbing train horn soundings. In Menlo Park, where there are four grade crossings in the corridor's 1.5 mile traversal of the community and two more, one just north and one just south of City limits, for an average of one grade crossing every quarter-mile, the adjacent land use in Menlo Park along the entire corridor is adversely impacted by train horn noise. Until grade separations or other actions eliminate the routine sounding of train horns at grade crossings, the claimed noise reduction benefits of the electrification project will generally be unperceived by the public. To eliminate the inaccurate portrait of noise reduction benefit that the DEIR currently presents, the document should provide noise contour maps for the alternatives in which the effects of train horn noise are considered as well as the other forms of train noise.
- On page 2-53, the DEIR opines that grade separating the entire system would delay electrification for several years. It also states that grade separating the entire line would increase costs with no commensurate improvement in train service. This particular assertion appears unfounded given that a fully grade separated system is an adopted goal of the JPB. We question this conclusion of the DEIR given the substantial history of grade crossing accidents on the line that grade separations would avert, given the serious disruption to system reliability that results when a rail accident occurs at a grade crossing and given that the claimed noise-reduction benefits of the electrification project generally will not be truly realized until and unless completion of grade separations eliminates the most disturbing noises created by train horns and wayside warning devices. Contrary to the statement of the DEIR, grade separations are obviously not just a benefit-less cost to the rail system. From the perspective of a community that is substantially benefited by Caltrain service but significantly adversely impacted by certain aspects of Caltrain operations that relate to a lack of grade separations (the train horn noise, congestion and safety at the grade crossings) a fair argument can be made that what the JPB should be doing is using first available funding to grade-separate the entire system and using later funding to do the electrification, in which case: 1) the claimed noise-reduction benefits would be realized because the train horn noise would be eliminated and 2) the electric third rail system that avoids all the overhead equipment many people may consider unsightly may prove most practical.

If electrification precedes complete grade separation of the Caltrain line, during any subsequent grade separation project, the electrification gear will need to be moved over to the shoofly and back again to the permanent tracks, an activity that obviously adds complexity, cost and time to any grade separation project. Less obvious but nonetheless significant, aside from moving the electrical system twice, just having to work near the hot wires while doing the ordinary grade separation construction activity will add complexity, time and cost and may also necessitate more intrusive and disruptive temporary construction easements. These are significant considerations for communities that are prospective candidates for grade separations.

- The DEIR notes that the statewide high-speed rail operation that hopes to operate in the Caltrain corridor will need the high voltage overhead type system and that cost-efficiency could be realized by having the Caltrain electrification compatible with it. However, at this point the statewide high-speed rail is nothing more than a speculative project; it is not assured of moving forward. Therefore, it may be premature to lock-in an electrification technology decision on the presumption that high speed rail will be under construction soon to share electrification costs with Caltrain. Caltrain may be wise to defer decision making on the details of electrification until the fate of the statewide high speed rail project is determined. If the statewide high-speed rail project proves a non-starter, Caltrain might be well advised to rely on the less intrusive electric third rail type system rather than the overhead system that high-speed rail would require and that some may regard as unsightly.
- The "Public Services and Facilities" section of the DEIR contains no information about the potential safety risks of the electrified system. What happens when 'hot wires' fall down due to some kind of incident (storm winds, motorist collision with support, etc.)? How quickly does the power get shut off? How frequently do such incidents happen in areas like the Boston to Washington corridor where such systems are operational? The DEIR is completely lacking regarding information of this type. Such considerations should be addressed in the document.

Thank you again for the opportunity to comment on the Draft Environmental Impact Report.

Sincerely,

Kent Steffens
Director of Public Works

cc: Mayor and Members of City Council
City Manager
Community Development Director
City Attorney
Town Council Members – Town of Atherton,
Via: Jim Robinson, City Manager

CITY OF MORGAN HILL

CITY MANAGER'S OFFICE

17555 PEAK AVENUE
MORGAN HILL, CA 95037-4128
TEL: 408-779-7271
FAX: 408-779-1592
WWW.MORGAN-HILL.CA.GOV

April 22, 2004

RVLMT APR26'04 AM10:15

Erik Olafsson
Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1306

Dear Mr. Olafsson:

The City of Morgan Hill has reviewed the Draft Environmental Impact Report for the Caltrain Electrification Program and is very supportive of the Board's efforts to modernize the Caltrain system. We believe that the reductions in noise pollution and air pollution will be especially appreciated in our South County location.

As Caltrain's popularity grows, we are all hopeful that additional funding will be identified and the frequency of train service to Morgan Hill will be increased. When this occurs, the safety hazards presented by the numerous at-grade crossings and unfenced railroad right-of-ways in Morgan Hill will also increase. The City asks that the Peninsula Corridor Joint Powers Board continues working cooperatively with the City on reducing the safety hazards associated with rail travel throughout the City of Morgan Hill.

Sincerely yours,

J. EDWARD TEWES
City Manager

DVLMT MAY25'04 AM11:51

May 18, 2004

COUNCILMEMBER JOHN MCLEMORE—CHAIRPERSON
PENINSULA CORRIDOR JOINT POWERS BOARD
1250 SAN CARLOS AVENUE
SAN CARLOS CA 94070

CALTRAIN ELECTRIFICATION DRAFT ENVIRONMENTAL IMPACT REPORT COMMENTS

Dear Chairperson McLemore:

On behalf of the Mountain View City Council, I am writing to provide the following comments on the draft Environmental Impact Report (EIR) for the proposed Caltrain electrification project. These comments address the EIR and do not constitute a position on the project or its importance in context to other planned projects along the Caltrain line.

Grade Separations

Mountain View and other communities along the Caltrain corridor are in the process of planning grade-separated crossings which provide improved railroad and vehicle roadway safety, decreased traffic congestion, and increased efficiency of the railroad and roadway. Construction of the grade separations after electrification will result in a significant loss in the Peninsula Corridor Joint Powers Board (PCJPB) investment in this project as large portions of the overhead contact system will need to be removed and reconstructed as grade separations are built. This also has the secondary effect of increasing the cost of grade separation projects. Considering the importance of grade separations and the cost implications of building an electrified system before these projects are complete, the EIR should include a discussion of this issue, and the PCJPB should consider the importance of grade separations and other critical system improvements when establishing project priorities.

Connection to High Speed Rail

The EIR states electrification of the system will "set the stage" for the California High Speed Rail (HSR) project as HSR will use electric train technology. However, if constructed, the HSR project will require all current at-grade crossings to be grade separated and a four-track alignment of the entire Caltrain Corridor. Considering the electrification project (as described in the EIR) does not call for grade separations or four-tracking of the line, the EIR should deemphasize the connection to the HSR project.

Power Distribution Station Siting

Another concern is the proposed siting of a power distribution station, or paralleling station, in Mountain View. The EIR proposes to locate the paralleling station on the soon-to-be-constructed efficiency studio site. Caltrain staff has been alerted to the matter and are aware an alternate location for the paralleling station will need to be identified.

Visual Impacts of the Overhead Contact System

We believe the installation of an overhead contact system (OCS) will cause significant visual blight throughout the Caltrain corridor. The EIR identifies the visual impacts of the OCS as less than significant; however, residents and businesses along the corridor may disagree with this finding. Considering the visual impacts of the OCS cannot be avoided, the EIR should identify this impact as an unavoidable significant impact. This is especially true considering trees, which currently screen homes and businesses from the railroad, will need to be removed in certain locations to allow for safe placement of the OCS system.

Energy Production and Capacity

Sufficient energy production and transmission capability has been an issue in California for several years. The EIR states energy production will be sufficient to support operation of an electrified Caltrain system. However, the EIR should provide data to substantiate this claim and should include a discussion about potential impacts if sufficient power generation or transmission capacity cannot meet the needs of the system.

Noise

Complaints received by City residents about Caltrain typically involve wheel squeal, vibrations, train horns and whistles—not diesel engine noise. Although train horns and vibrations are identified in the document, the EIR does not identify wheel squeal as an impact or suggest possible mitigation measures for any of these noise generators. We suggest including a discussion of this item in the EIR.

Range of Alternatives

Another issue of note is the range of alternatives, specifically the omission of the clean diesel engine alternative. Considering the cost of electrification, clean diesel engines should be considered if funding is not secured or is delayed. Clean diesel engines could be purchased as older diesel locomotives need replacement or overhaul, acting as an interim measure to address air quality issues.

Construction Schedule and Impacts

The EIR should recommend implementation of all mitigation measures to reduce the impacts of construction noise and vibrations. Temporary relocation of residents most impacted by noise (to hotels or apartments) should also be considered.

Electric Multiple Units

It is unclear if the EMU scenario incorporates possible cost increases which may arise as a result of manufacturing specialized units to meet U.S. standards. The EIR should include a discussion of additional costs which may arise if this option is considered.

Transbay Terminal Project

A key component of the Transbay Terminal project is to extend Caltrain from the Fourth and King Street station to the planned Transbay Terminal building. However, for this project to be successful, electrification of Caltrain would be required or dual mode diesel engines would need to be used. The EIR does not include a discussion of these facts and, considering the direct connection the Transbay Terminal project has to electrification, a discussion on this topic should be included in the final EIR.

Thank you for providing us with the opportunity to comment on this document, and we sincerely hope you will address these issues in the final EIR. If you or any of your staff have questions, please feel free to contact Peter Skinner, Senior Administrative Analyst, at (650) 903-6311.

Sincerely,

Matt Bear
Mayor

MP/PS/5/PWK
904-05-18-04L-E-2^

cc. Mr. Michael Scanlon, General Manager—Caltrain

Ms. Carol Wolf, Senior Engineer/Project Manager—Caltrain

City Council

CM, PWD, TPM, SAA—Skinner, F/c

RCVD MAY 24'04 AM 8:43

May 19, 2004

Eric Olafsson, Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
San Carlos, CA 94070

Dear Mr. Olaffson:

Thank you for the opportunity to review and comment on the draft EA/EIR on the proposed CalTrain Electrification Program. The following are comments and concerns regarding the electrification, potential impacts as they might pertain to Redwood City, and recommended mitigation.

The CalTrain line passes through Redwood City's Downtown area. Efforts are underway to make the Downtown a destination point incorporating employment, retail and entertainment. There are also plans to encourage new higher-density residential development in and around the Downtown area, some of which would be located near the CalTrain tracks, particularly near the station site. A substantially improved CalTrain service could complement the attractiveness of Redwood City's Downtown area, and electrification would reduce noise and elimination of diesel exhaust fumes from passing trains, enhancing the development potential of the area adjacent to the rail line. However, a poorly designed overhead catenary system could counteract the environmental and transportation benefits that electrification can provide.

Aesthetic Impacts
Both the Planning Staff and the Architectural Review Committee have looked at the proposed electrification system and have the following concerns and recommendations.

- Planning Staff is recommending the use of center-pole construction as shown in Figure #2.3-1. If this is not feasible, side-pole construction is the second choice. In addition, the pole foundations should be designed to be flush with the ground rather than the exposed concrete foundations as shown in Figure # 2.3-2

- The drawings and photosims show the poles supporting the catenary and feeder cable. What is the likelihood that these poles will also be used to support other lines such as fiber optic cables, signal circuit cables, high-voltage transmission lines, etc? The addition of other cables and wires could contribute to overall visual clutter.

COMMUNITY DEVELOPMENT SERVICES

PLANNING & REDEVELOPMENT

1017 Middlefield
P.O. Box 391
Redwood City,
CA 94064-0391
FAX (650) 780-0128
TDD (650) 780-0129
www.redwoodcity.org

ECONOMIC DEVELOPMENT
(650) 780-7233

HOUSING
(650) 780-7290

PLANNING
(650) 780-7234

REDEVELOPMENT
(650) 780-7233

- Undergrounding existing overhead utilities that are in proximity to the rail line combined with a landscaped buffer made up of appropriate tree species could reduce the visual impacts of the overhead electrification. Undergrounding overhead utilities would be preferable to installing taller poles to raise the height of the utility lines for sufficient clearance above the overhead catenary.

- Although no specific designs have been proposed, there are plans to make additional improvements to Redwood City's CalTrain station. This may include an architectural feature such as a roofed-over structure that would enhance the identity of the station area, making it an attractive focal point within the Downtown area. Whatever design may eventually be selected should integrate the structure with the electrification hardware. In Europe, where overhead railroad electrification is in common use, stations have been designed to integrate the electrification support system with the design of the station structure.

Future High-Speed Rail

The proposed electrification will allow for making the CalTrain corridor part of a future Bay Area-Los Angeles high-speed rail line. At this time, there are no specific plans as to how the high speed trains will be accommodated. Will these trains, once on the CalTrain corridor, reduce speed and share track with CalTrain commute trains, or will they require a completely new grade-separated track alignment? If the latter option is proposed, does it make sense to spend money installing new electrification infrastructure, only to have it relocated or replaced a few years later to construct a new, fully grade-separated rail alignment?

Substations

The Redwood Junction Wye is being proposed as a location for a switching substation. Although this site is located just outside of Redwood City in an unincorporated area, will the proposed substation require installing new high-voltage lines to connect with the PG&E system?

Utilities

Table 3.16-1 indicates states: "The California Water Service Company provides water service to unincorporated Redwood City, and the City provides service for remaining area." A variety of public and private underground utilities cross the CalTrain tracks within Redwood City. These include gas mains, phone lines, sewer and water lines. In addition, there are other underground utilities that parallel the CalTrain right of way including fiber optic cables. Redwood City's Engineering Division has information on the specific locations of these underground utilities. Care must be taken to assure that the foundations for the poles that will support the overhead catenary do not disturb or damage any underground utilities.

Noise

Table 4.2-3 of the Draft, addressing local noise ordinances, states that Redwood City's Ordinance permits construction noise levels of 110 dBA on Saturday, Sunday and holidays from 9 a.m. to 8 p.m. Actually, the Noise Ordinance prohibits construction noise at or near residential areas all day on Saturdays, Sundays, and holidays (see attachment).

If you have any questions regarding these comments, or if you need any additional information from Redwood City, please contact me at (650)780-7238.

Sincerely

Gary Bonte
Associate Planner

Cc: Michael Church, Planning Director,
Joel Patterson, Community Development Director

Attachment

NOISE LIMITATIONS UPON WORK ON PROPERTIES IN OR NEAR RESIDENTIAL DISTRICTS

(Includes any and all deliveries)

NOISE PROHIBITED

MONDAYS through FRIDAYS ..... 8:00 p.m. to 7:00 a.m.
SATURDAYS, SUNDAYS, and HOLIDAYS ..... ALL DAY

During the foregoing periods, no noise above the local ambient level in Residential Districts shall be generated by construction work or activities within 500 feet of any residential neighborhood.

WORK NOISE LIMITS AT ALL OTHER TIMES:

1. No individual item of machinery, equipment, or device used in or near a Residential District shall produce sound in excess of 110 dBA, measured 25 feet from such machinery, equipment, or device;

2. Work noise level at any point outside of the construction site property plane shall not exceed 110 dBA within any part of a Residential District.

The foregoing provisions are requirements of the Noise Regulations of the City of Redwood City, violations of which are punishable pursuant to the provisions of Chapter 24 of the Redwood City Code.

EXEMPTIONS: **Emergency work or work performed personally by the owner or resident.**

(Ord. No. 2013, § 1, 4-2-90)
City of Redwood City

DEPARTMENT OF COMMUNITY DEVELOPMENT

330 West 20th Avenue
San Mateo, CA 94403-1388
Web Site: www.cityofsanmateo.org

Building Division
522-7172
Fax 522-7171

Civic Facilities
522-7281
Fax 522-7289

Code Enforcement
522-7150
Fax 522-7201

Economic
Development
Business Assistance
522-7240
Fax 522-7241

Neighborhood
Improvement
& Housing
522-7220
Fax 522-7221

Planning Division
522-7202
Fax 522-7201

TDD/TTY
522-7047

(Area Code '650'
for all numbers)

May 14, 2004

Erik Ólafsson, Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1307

Re: Comments on the Rail Electrification EA/DEIR

Dear Erik:

Thank you for the opportunity to review and comment on the EA/DEIR for the rail electrification project. The City of San Mateo has several clarifications, comments and suggested mitigations, which reference the following specific sections or pages within the report.

1. **Section 2.3.2.1:** The EA should illustrate where the different overhead contact systems are expected to be used along the whole length of the corridor. The document describes the type of physical situations where the different systems might be used, but a simple type of plan view schematic illustrating where the different types are expected to be located would be helpful.

   For instance, in San Mateo, in the vicinity of the Hillsdale Station, Cal Train has plans for a four-track alignment and a new station to facilitate express service and passing tracks. If the electrification project precedes the passing track project, what overhead contact system will be used? Will the multi-track arrangement with headspan construction be utilized, or will a two-track system be installed and subsequently replaced with a multi-track system?

2. **Sections 2.3.2.3, 3.1.3 & 3.9.1.2 & Figures 2.3-10 and 3.1-1:** Paralleling Station PS-4 is stated to be located on land that would be vacated following relocation of the Hillsdale Station northward sometime in the future. Given the size and utilitarian character of these structures, the City believes this there are potential adverse/significant land use and visual impacts requiring additional mitigation.

3. **Section 3.1.3 and Section 3.9.2.2:** The City of San Mateo has an approved "El Camino Real Master Plan" (ECMP) that governs the site of the proposed location of PS-4. In general, the objectives of the ECRMP are to enhance the character of El Camino Real through a variety of public and private improvements that result in a safer, more attractive pedestrian environment. An ECRMP goal for the precise area of the proposed PS-4 location states, "Encourage mixed-use development as part of an expanded transit station area plan associated with the relocated Hillsdale Caltrain station. This plan may also require special design review consideration." (pg.117) The proposed location of PS-4 would not be consistent with the ECRMP.

   The City of San Mateo has also been processing the "Rail Corridor Transit-Oriented Development Plan" (Corridor Plan) plan for the area between the Hillsdale and Hayward Park Cal Train stations. While the project is not yet approved, it has been undergoing an intense public review process for the past 5 years and will be in final public hearings within the next several months. The Corridor Plan proposes establishment of a new "TOD" zoning classification that includes the area shown for the location of PS-4. The Corridor Plan provides for transit-oriented development within the immediate vicinity of the relocated Hillsdale Station, including the area where the existing station is located. Included within conceptual site plan is a mix of retail, office and residential uses adjacent to the station. Parking structures to service both private uses as well as JPB parking for the new station are also conceptually located in this immediate vicinity. The EA/DEIR should acknowledge this planning process, the potential zone change, and the resulting inconsistency of a parallel station use within the TOD zone.

   The City has been working with JPB staff on a conceptual station design, including discussion of multi-modal access, type of structure for the raised grade, parking needs and location, and so forth. However, the location of a paralleling station of the size and visual character as displayed on Figure 3.1-1 would result in a significant visual impact upon this area and the transit village character and improved pedestrian environment intended to be created in this area.

   For the reasons stated above, the City requests that consideration be given to adding language in Section 3.1.3 that provides specific mitigation for the visual impacts created by PS-4. We also request modifying Section 3.9.2.2 to recognize the land use inconsistency between the PS-4 use and the ECRMP and anticipated Corridor Plan policies and goals. The mitigation could speak to undergrounding, relocating, or redesigning PS-4 to eliminate visual impacts and be consistent with the ECRMP and the anticipated policies, goals and objectives of the Corridor Plan.

4. **Various locations:** The text should be corrected to eliminate references to the Bay Meadows Golf Course, which was removed in 1996 or 1997 to make way for new horse barns for the racetrack operation. References exist at **page 3-17** (first paragraph) and in **Table 3.14-1** on **page 3-119**, but may elsewhere in the document.

5. **Page 3-99:** The report should acknowledge that if the San Mateo Rail Corridor Transit-Oriented Development Plan were approved, there would be the potential for PS-4 to be located within 250 feet of residential units.

6. **Table 3.15-4 (page 3-127):** This table should be modified to include the fact JPB parking exists and that counts for the two-level parking garage for the San Mateo

Station. The City leased the parking in this garage from the JPB for a 35-year term, with an option for a second 35-year term. The asterisk should be modified to indicate that parking at this garage is shared between the City and JPB. There are a total of 243 spaces in the garage; 79 on the surface level and 164 below grade. Of the total, 18 are 2-hour limited parking while the balance are 10-hour spaces. Summer 2003 occupancy survey data indicates that the upper (surface) level averaged 66% occupancy (52 spaces), with a high of 91% during the 7:00 PM to 8:00 PM hour. The lower level averaged 56% occupancy (96 spaces), with a high of 82% during the 1:00 PM to 2:00 PM hour. (Data from Public Works)

7. **Table 3.15-4 & Table 3.15-7:** The inconsistency should be fixed between Table 3.15-4, which indicates that there are 294 spaces at the San Mateo station and Table 3.15-7 (page 3-135), which indicates that the demand for 304 parking spaces under the electrification alternative is met and there is no demand shortfall. The 294-space figure should also be corrected to 243 spaces, as indicated by the City's survey.

8. **Table 3.15-7:** This table indicates a parking demand for 1,026 spaces at the Hillsdale Station under the electrification alternative. During the Corridor Plan process, the City was told that the parking demand for the Hillsdale Station was 1,360 spaces. Please clarify the distinction between these two parking demand numbers.

9. **Table 4.2-3 (page 4-19):** The table indicates construction hours for the *County* of San Mateo. Perhaps it is a coincidence, but the construction hours noted are the same as for the *City* of San Mateo. We believe the table should be corrected to remove the word "County" from the San Mateo line, or add another row for the City's construction times.

Again, thank you for the opportunity to comment. Should you have any questions, please contact me at 650-52207207 or at sscott@cityofsanmateo.org.

Sincerely,

Stephen Scott
Principal Planner

cc: Ron Munekawa, Chief of Planning
Min-Tze Cheng, City Engineer

May 25, 2004

Erik Olafsson
San Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1306

RE: Caltrain Electrification Program EA/EIR

Dear Sir:

The City of Santa Clara Planning Department has had the opportunity to review the EA/EIR for the proposed Caltrain Electrification Program and has prepared comments, listed below, that should be addressed in the Final EA/EIR for this project.

The EA/EIR provides the location of the proposed supply substations, switching stations and paralleling stations for the power supply system and references alternate locations under consideration. Section 2.3.2.2 states: "In each case, JPB would first seek to purchase the site labeled as "A" and would consider the alternative sites (labeled "B" and "C") in order if the previous letter site could not be obtained." It is not clear as to where this information is presented. Graphics and parcel data should be provided identifying the locations of the alternate sites, and referenced in the document, to allow each jurisdiction the ability to assess potential conflicts or impacts of the alternate locations.

Section 3.1 of the EA/EIR discusses the aesthetic impacts of the proposed project on the visual character of the Caltrain Corridor to sensitive visual receptors and scenic views. In the City of Santa Clara, the Caltrain Corridor is located adjacent to residential, public open space, institutional, industrial and office uses. The Santa Clara Caltrain Station is an historic depot that is listed on the National Register of Historic Places. The proposed project would be visible by the residents, recreational users, students, and business occupants within the view corridor of the rail alignment. The proposed Program may have a potentially significant impact on sensitive visual receptors and scenic views within the City of Santa Clara and should be evaluated for aesthetic impacts in the environmental analysis. A discussion of the impacts posed by the overhead contact system and overbridge protection structures to sensitive visual receptors along the corridor and scenic viewshed surrounding the historic train station should be included in Section 3.1.1.2 of the document.

A discussion of biological resources is presented in Section 3.4 of the EA/EIR that identifies a limited number of special-status species that have a moderate potential to occur within the rail corridor. This list does not include the burrowing owl, but is referenced in Enclosure A of Appendix C in the EA/EIR. As stated in the document: "Pre-construction surveys are recommended to ensure that there is no incidental take of species during construction (see Section 3.4.3, Mitigation)." The mitigation measures are identified in Section 4.2.3 but are limited to the California red-legged frog, San Francisco garter snake,

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Monarch butterfly and nesting swallows. This list should be expanded to include burrowing owls, as grassy areas adjacent to the rail line may be suitable for nesting and foraging of this special status species and the language should be altered to state that a pre-construction survey will be "required" as a mitigation measure of project construction.

Section 3.5 of the EA/EIR focuses on cultural resources and identifies prehistoric and historic archeological sites in or potentially in the project area. The City of Santa Clara has an Archeological Monitoring and Treatment Plan for construction related activities within archeological, cultural and historical sensitive areas. In addition to the mitigation measures posed in the Cultural Resources section of the EA/EIR, the document should state that the project shall comply with adopted City Archeological Monitoring and Treatment Plan of archeological, cultural and historic resources. A copy of this document is attached.

Section 3.15 describes the existing transportation network and outlines future highway, rail and bus transit improvements. A discussion of the voter approved BART extension project, from Fremont to Santa Clara, is not provided in the analysis of potential impacts. An EIR/EIS for the BART extension project has been circulated and preliminary engineering is underway that includes the location and conceptual design of the route alignment and station facilities. The City of Santa Clara is the terminal station for the BART route and is proposed to include a parking structure and underground or overhead pedestrian crossing, in addition to station and maintenance facility. The EA/EIR for the Caltrain Electrification Program needs to address potential design conflicts and/or coordination efforts necessary to integrate the two systems into a compatible and functional design. Overhead clearance of the catenary system, OCS pole locations, and location or type of pedestrian crossings will require consideration and coordination between the two transit providers.

The Transportation Section also details existing supply and demand of Caltrain parking and provides parking projections for future demand. Ridership is projected to increase with proposed improvements of the Caltrain system. Parking projections for demand are presented in Table 3.15-7, which indicates a deficiency of 237 parking spaces at the Santa Clara Station based on projected demands for the year 2020. The matrix also reveals that a parking deficiency totaling 674 spaces is projected for the Lawrence and College Park Stations, the two stations closest to the Santa Clara Caltrain depot. The EA/EIR stipulates that the Electrification Program would increase the number of parking spaces from 9,481 to 10,697, a net increase of 939 spaces system wide. Clarification is required as to where the additional parking will be provided. The deficiency in parking spaces at the Santa Clara Station in 2020 appears to be significant and is exacerbated by parking deficiencies at the adjacent stations along the route. A discussion of the cumulative effects of localized parking deficiencies need to be examined and a determination of whether the provision of additional surface parking spaces and or new construction of parking structures is warranted.

Section 3.16 provides information related to existing utility and service systems within the Caltrain Corridor right-of-way. The City of Santa Clara provides electric and water service. The following corrections/additions should be made to Table 3.16-1, Item 24:

- Overhead electrical wires cross the right-of-way at 8 locations. The wires have 60kV and 12kV capacities. The 60 and 12 kV overhead electrical wires run parallel with the JPB right-of-way at various locations.
- Underground electrical wires cross the right-of-way at 3 locations. The wires have 12kV capacity.
- Construction could affect existing water and electric facilities. Electric and water facilities should be identified on project plans and should be avoided or may need to be relocated, and shall require City review and approval.

Silicon Valley Power (SVP), a municipal utility, is the electric service provider within the Santa Clara City limits. According to SVP, there is sufficient capacity to serve any proposed loads within its service territory. Coordination with SVP and the City's Water Department shall be required for permitting and installation of facilities and services, as a responsible Agency, and should be noted in the EA/EIR.

Thank you for the opportunity to review the EA/EIR for the Caltrain Electrification Program. We look forward to your response and the inclusion of our comments in the final environmental document. Should you have any questions or comments regarding the information presented above, please call the Planning Department at 408-615-2450.

Sincerely,

for Geoffrey Goodfellow
Director of Planning and Inspection

attch: City of Santa Clara Archeological Mitigation Measures and Standards

cc: Arthur Henriques, City Planner
Steve Yoshino, Director of Public Works
Dave Pitton, Traffic Engineer
Jennifer Sparacino, City Manager
Tom Fitzwater, Environmental Planning Manager, VTA- Environmental Planning, 3331 North First Street, Building B, San Jose, CA 95134-1927

City of Santa Clara

Archaeological Mitigation Measures and Standards

Insofar as this site has the potential to contain archaeological resources, the applicant shall retain the services of a qualified archaeologist to monitor earth-moving activities. Monitoring shall consist of coordinating subsurface work to allow for the careful examination of vertical and horizontal soil relationships for the purpose of defining positive archaeological finds (prehistoric and/or historic). The archaeological monitor must be approved by the Director of Planning and Inspection. After written approval, the Planning Division must be notified at least 48 hours prior to any grading or other subsurface work on the site and the client must provide a written protocol which stipulates the manner in which the applicant shall comply with the monitoring requirements. The monitor must maintain a field log of their presence and observations, carefully noting soil conditions. In the event that cultural resources are encountered, all work within the proximity of the find shall temporarily halt so that the archaeologist can examine the find and document its provenience and nature (through drawings, photographs, written description, etc, as necessary). The monitor will then direct the work to either proceed if the find is deemed to be insignificant or is adequately documented and resolved, or continue elsewhere, as appropriate, until adequate mitigation measures are adopted or the matter is otherwise resolved to the satisfaction of the City.

Once a find has been made and deemed to be significant, the archaeologist will then submit a Treatment Plan (if one was not previously approved) to the City. The key elements of a treatment plan shall include the following:

a) Identify scope of work and range of subsurface effects (include location map and development plan).
b) Describe the environmental setting (past and present) and the historic prehistoric background of the parcel (potential range of what might be found).
c) Develop research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information).
d) Detail field strategy used to record, recover, or avoid the finds (photos, drawings, written records, provenience data maps, soil profiles, excavation techniques, standard archaeological methods) and address research goals.
e) Analytical methods (radiocarbon dating, obsidian studies, bone studies, historic artifact studies [list categories and methods], packaging methods for artifacts, etc.).
f) Report structure, including a technical and a layman's report and an outline of document contents within one year of completion of development (provide a draft for review prior to a final report).
g) Disposition of the artifacts.
h) Appendices: site records, updated site records, correspondence, consultation with Native Americans, etc. The need for a burial agreement plan for Native American burials can be incorporated into Treatment Plan but must be done in consultation with MLD. Plan should detail goals, methods, and disposition of remains and associated artifacts.

CITY OF SUNNYVALE

The Heart of Silicon Valley

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May 12, 2004

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Councilmember

Julia E. Miller
Councilmember

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Councilmember

Subject: Review of Environmental Assessment, *Caltrain* Electrification Program

Dear Mr. Olafsson:

At its May 11, 2004 meeting, the Sunnyvale City Council considered policy on the electrification of Caltrain. The City Council adopted policy to support Caltrain electrification concurrent with grade separation of roadway crossings in the City of Sunnyvale and elsewhere on the Peninsula corridor for a future four track configuration. Electrification should be done in concert with high speed rail development. This City policy shall be taken into account in assessing environmental impacts of the proposed electrification project.

The City of Sunnyvale has completed its review of the Environmental Assessment/Draft Environmental Impact Report for the *Caltrain* Electrification Program. The City has identified the following issues that shall be addressed in the Final Environmental Impact Report/Environmental Assessment.

1. Overhead Wire System (OCS) Visual Impacts:

In Section 2.3.2.1, the penultimate paragraph describes the portal alternative as more visually intrusive, however, this may be regarded as a 'matter of taste' conclusion. The trade-off seems to be that the headspan poles and span-wire catenary wires are much taller than the portal, while the portal is lower but includes a much heavier type of construction for the horizontal structural member.

The City prefers a portal configuration as the basic approach. Using colored poles as mentioned in the report as a mitigation (Section 3.1.3, second paragraph), so that coloring might also be considered for portals is preferred. Headspan poles are too tall to camouflage effectively with trees, but tree planting (also mentioned in Section 3.1.3) might do some good near a portal. Graphic studies to enable envisioning specific OCS implementation in Sunnyvale in advance shall be conducted in order to assess visual impacts of the mitigated conditions.

The City believes more attractive architecturally-designed portals should be developed for use near Sunnyvale Station as well. In addition, the City requests that any additional overhead wire complexity, such as overlaps, be avoided or relocated away from Sunnyvale downtown or the Sunnyvale *Caltrain* station. There shall be a separate design task involving interaction with City staff which consists of a detailed design review for aesthetics to weed out any superfluous complexity and clutter that creeps into the final design details. Section 3.1.3 promises under *"Mitigation"*, second paragraph, that the Joint Powers Board, *"(JPB) will coordinate with local jurisdictions...to develop design guidelines to minimize visual effects"*. The final design should aspire to simplicity, uniformity, symmetry, etc.; and these objectives and their implementation and enforcement should be made obligatory on the JPB and its designers and construction contractors.

A feature shown in Figures 2.3-1, 2.3-2 and 2.3-3 is an underground duct bank for 'miscellaneous cables' If an underground duct bank is contemplated, the overhead feeders shall be located there as well. This would be more important if there ends up being a need for more that the two overhead feeders as shown and as described in Section 2.3.2.2, last paragraph.

There is one traction power substation proposed for construction in Sunnyvale. It is located north of the *Caltrain* tracks and east of the Lawrence Expressway overhead, as illustrated in Figure 2.3-15. Visual mitigation shall include landscaping.

2. ***Railroad Gate Down Time:*** As described in Section 2.3.2.7, much of the existing *Caltrain* signal system (mostly

newly-installed under the 'Baby Bullet' CTX project) will have to be modified and/or replaced because the track circuits are not compatible with electric traction power negative return through the rails. Of greatest significance to the City, the Constant Warning Time feature of state-of-the-art grade crossing signals (especially important at locations near *Caltrain* stations such as at the Sunnyvale Avenue crossing) is available for non-electrified railroads such as *Caltrain* is now, but is incompatible with electric railways. This could also affect the Mary Avenue crossing but probably to a lesser degree because trains operate there at full speed.

The report admits that electrification affect on the signal system could create problems by causing extended gate down time. The report also admits that there is no off-the-shelf solution for this, and that the traffic impact at the *Caltrain* crossings would be greater than along any other electric railway in the country. Therefore the proposed solution in the report is to solicit equipment suppliers to develop a new technology ("Caltrain *is considering a pilot project...*") especially for *Caltrain* based on untried 'new technology'. How this research and development project would interface with the electrification project, and what it would cost, is not fully described. This is a significant, unmitigated impact, and shall be addressed as such in the EIR. Detailed assessment of the resulting impact on traffic flow and delay on Mary and Sunnyvale Avenues at the railroad crossings shall be included in the FEIR. Assessment of additional noise impact due to prolonged sounding of crossing warning bells shall also be provided in the FEIR. Appropriate mitigation shall be identified such as grade separation or feasible crossing warning signal modification using available technology.

3. ***Overbridge Protection Barriers:*** These are proposed for retrofit to existing bridges crossing *Caltrain* to preclude objects from falling or being thrown onto the OCS wires. In Sunnyvale, overbridge protection barriers would be installed (see Table 2.3-2) on the Mathilda Avenue, Wolfe Road and Lawrence Expressway overheads and on two pedestrian overheads. These shall be constructed to be aesthetically unobtrusive, and in the case of the Mathilda Avenue bridge, shall meet the City's goals and objectives for design of this bridge to be an architectural gateway to downtown

Sunnyvale. The City is in the design stage of a rehabilitation project for this bridge which will incorporate architectural features to promote the gateway aspects of the bridge. The overbridge protection barriers for Caltrain electrification shall be designed to harmonize with the architectural features of the Mathilda Avenue bridge, and minimize the aesthetic impact on the bridge.

Section 4.1.1.3 fails to describe the construction impacts of this work on roadway traffic or on pedestrians (i.e.-lane and sidewalk closures) on these bridges. These impacts shall be reported and appropriate mitigation identified.

4. ***Train Noise Issues:*** The report states (Page 3-95, third paragraph) that noise level references for the existing gallery cars could not be measured because of the dominant diesel locomotive noise during pass-bys. However, on Page 3-97 is the description of noise measurements obtained for a bi-level *Sounder* coach (A Bombardier-built Seattle area coach, probably on loan to Los Angeles Metrolink, and similar to the new *Caltrain* 'Baby Bullet' cars) on pass-bys on Southern California. As Metrolink is also powered by diesel locomotives, how were these measurements obtained; and if they were, why could not measurements be obtained for the gallery cars? This shall be explained in the Final EIR, and if there is no reasonable constraint to gathering this information, then information on the existing gallery cars shall be collected and presented in this noise analysis.

   Table 3.11-4 summarizes the findings on noise. The format of the table tends to obscure some conclusions. If the *Grand Totals* were to combine the *'Impact'* and *'Severe Impact'* values, and then also to add these resulting numbers together for both the *'Single Family'* and *'Multi-family'* subtotals, a single Impact-number for each Option would result as follows:

   Non-Electrification/ Diesel Alternative,
   Residences Impacted:
   1,667
   Option 1, New Electric Locos & old Gallery Cars,
   Residences Impacted:
   1,099
   Option 2, Multiple Unit Cars,
   Residences Impacted:

1,510
Option 3, New Electric Locos & new Bi-level Cars,
Residences Impacted:

0

Both Options 1 and 3 use electric locomotives, so the net benefit is due to the trailer coach replacement, not anything related to electrification. If this is so, replacement of the present gallery cars with new bi-levels, which is already being undertaken by the JPB, achieves the significant noise reduction without electrification. This should be presented as the base non-electrification comparison alternative.

It is not clear why one of the rolling stock options is to replace the present *Caltrain* fleet of trailer cars so that they can be pulled by electric locomotives. The existing fleet is described as compatible with electric locomotives, and keeping the present fleet is one of the options. So, excluding the noise analysis, The FEIR shall explain why a fleet replacement option is included in the study. It is true that gallery cars may be considered functionally obsolete, but their replacement for that reason should not be attached to the unrelated electrification project.

The DEIR report also does not mention that *Caltrain* has recently acquired new Bombardier bi-level coaches for use on the express CTX service, or describe their compatibility with electric locomotives or highlight the conclusions of the noise study, that these new cars are more quiet. The Final EIR shall incorporate consideration of the new Bombardier coaches, describe their compatibility with electric locomotives, and relate the existing coaches' operation to the noise study of electrification. Taken together with the unavailability of compatible multiple unit electric vehicles (see above), the inclusion of rolling stock replacement in the project scope confuses the assessment of benefits and impacts of electrification, as it goes to the essence of the project purpose. Complete replacement of rolling stock also raises other issues, and is very complex. For example, the wheelchair access to the present fleet is inconvenient and slow, requiring either lifts on the gallery cars or bridge plates for the new bi-levels. If a completely new fleet is contemplated, the objective should be to provide level platform boarding. This might entail platform modifications,

etc. The public shall be advised of these matters and the FEIR shall do so.

The report shall also consider soundwalls as a noise mitigation alternative, as noise reduction is a primary project purpose and benefit. This alternative shall be developed in detail with appropriate siting, cost, and noise reduction analysis.

5. ***Electromagnetic Interference (EMI):*** This aspect is discussed in Section 3.17.4. It will probably not be a problem for most of the neighboring land uses in Sunnyvale. However, due to the prevalence of high-tech and special business activities in Silicon Valley, the FEIR shall include, as mitigation, notification and consultation in advance with local neighboring businesses and others at interest about the EMI issues related to the project.

6. ***Scope of Alternatives and Their Benefits:*** On the first page of the report (S-1) is the statement, *"Electric trains can accelerate and decelerate at better rates than diesel powered trains"*(see also Section 2.3.2.6). Although this is perhaps the most compelling benefit described for the proposed project, nowhere in the report is there any data to substantiate this claim.

   While one would suppose that it is probably true that multiple unit (MU) self-propelled electric vehicles, with motors on each car, could indeed improve on the acceleration of locomotives, the report does not define MU rolling stock as central to achieving the goals of the project. Multiple unit rolling stock is only one of three rolling stock options. Also, the report admits on Page 2-39, last paragraph, that there is no existing MU rail vehicle type that is of the correct configuration for service on *Caltrain*. The other two rolling stock options would use electric locomotives, which are available 'off-the-shelf', and therefore are actually much more likely to be part of the actual project. The report (Table 2.3-7) also fails to identify sufficient funding sources for MU fleet conversion.

   There is no quantitative data on the acceleration/deceleration characteristics or power/weight ratio information on either diesel locomotives, electric locomotives or MU electric vehicles. The FEIR shall explain

why an electric locomotive, even if more powerful, could better a diesel when pulling a short *Caltrain* of five (or even a few more) cars.

All of the rolling stock options as described in Section 2.3.2.5 are lumped together under one Alternative, so that travel time, ridership, etc. is supposed to be the same for the MU and locomotive options. This undermines the premise that acceleration would be improved as there is no comparison of performance between locomotives and MU vehicles.

Indeed, Table 3.15-6 indicates that projected net time savings between the downtowns of San Francisco and San Jose will be only two minutes. Under *"Travel Time"* on Page 3-130 is the admission that the maximum time savings of only 12 per cent would be for the local trains; express trains would not save more than three percent because they stop less and therefore cannot benefit much from improved acceleration anyway. As a result, all the time-savings benefits listed in Table 3.15-6 are miniscule. The FEIR shall explain how these time savings were calculated without quantitative data on acceleration/deceleration rates.

There are also other implications for MU vs. electric locomotives. The maintenance facilities required should be configured differently. An MU fleet would be more flexible to operate, with very short trains possible off-peak and longer ones during peak periods. More frequent service might be the trend, using shorter MU consists, thus yielding a higher level of passenger service. Perhaps the crew requirement on each train could be reduced to lessen the labor cost component. With more frequent trains, individual train capacity could be less, thus conventional, single-level, off-the-shelf North American MU cars might be feasible. These are some of the potential benefits of an MU fleet that electrification could make possible. These scenarios shall be addressed in the FEIR in order to provide a complete assessment of the MU alternative.

7. **Caltrain *Service Disruption During Construction*:** Section 4.1.1.1 discusses construction operations. On page 4-2 is the statement that construction of OCS would require weekend and other outages including total suspension of

passenger service on weekends. The exact extent of these service suspensions is unknown, but Figure 4.1-1 indicates a duration of more than two years for OCS construction.

The JPB approved a two-year suspension of weekend Caltrain service for the CTX project, which was a less costly one and thus one of lesser magnitude than the proposed electrification. However, the CTX project will yield considerable passenger benefits, and thus the service suspensions enjoyed adequate community support. If the community is to be asked to endure yet another lengthy service suspension for electrification, will the benefits be perceived as worth while?

8. ***Operating and Maintenance Costs:*** These are described in Section 2.3.3.3 and Table 2.3-9. There is no description of which O&M costs were calculated. For example, are there anticipated net fuel cost savings, and how do these compare to maintenance costs for 77 miles of a complex OCS system? The O&M costs of the Non-electrified Alternative shall be shown in the FEIR for comparison with the O & M costs of electrification alternatives.

9. ***Public Perception***: On Page S-3, third bullet, is the thesis that : *"An electrified* Caltrain *would better address Peninsula commuters' vision of an environmentally friendly, fast, reliable service. This will also stimulate ridership. Additionally, an electrified* Caltrain *system would set the stage for an expanded regional electric express and, potentially for a statewide high-speed rail service..."*

On Page 3-130 in the section on ridership is the contention that: *"...a major deficiency of the current* Caltrain *service has been its image of an outmoded operation that dates back to the freight rail-oriented Southern Pacific. The continued use of diesel locomotives...has been an important factor in sustaining this image...a factor not addressed in ridership models. Electrifying the* Caltrain *service would increase its consumer appeal...The Electrification Program would more closely meet* Caltrain *riders' vision of an updated, clean, high-tech type* Caltrain."

The above statements are best characterized as promotional spin; they certainly are not borne out by any analysis of the report, and are actually in conflict with some of the report

conclusions regarding travel time and ridership, and also largely in conflict with reality. There was no rider or other attitudinal study undertaken to ascertain peoples' views or *"vision"* or any determination of *"consumer appeal"* on whether diesel locomotives are *"outmoded"* or the like. Case in point, the new *Caltrain* diesels are produced by designers that take into account market appeal in industrial design and appearance and are very much more modern looking than any of the boxy electric locomotives or heavy electric MUs on the market).

On the other hand, a most common public complaint about light rail and similar projects are the unsightly overhead wires. Electric trains are not necessarily *"high-tech"* either; they date back to the 1880's and predate the diesel engine. Diesel-powered *Caltrain* has always been reliable with an excellent on-time record, and even the old, much reviled Southern Pacific rightly took pride in the punctual schedule performance of its Peninsula trains. But there is no discussion in the report (Section 3.10) about the consequences of local or general power failures on the reliability of an electrified *Caltrain*.

Accordingly, the above statements of the report appear to reflect promotion of a political agenda, and as such do not have a place in a technical study. Statements, such as those above referenced, which do not have a basis in objective fact as it relates to the environmental impacts of electrification shall be omitted from the FEIR.

10. ***Relationship to High Speed Rail:*** There is considerable question whether electrification of *Caltrain* really *"sets the stage"* for high-speed rail entry onto the Peninsula. There actually is reason to believe that electrifying *Caltrain* now would set back the prospects for high speed rail in the corridor. Statements to the effect that electrification would facilitate high speed rail in the Caltrain corridor shall be deleted from the FEIR unless detailed high speed rail alignment and facilities design analyses are conducted and available to support this conclusion.

    The major prerequisite for high speed rail in the JPB corridor is a continuous four-track rail line and probably its complete grade-separation. The CTX project will provide four tracks in only a few short segments of *Caltrain*. The majority of the line will remain two tracks for now. If the two-track segments are electrified in place, it will make quadruple-tracking those segments, as well as new grade separations anywhere on the line, much more costly.

    If areas of remaining double-track need to be shifted to accommodate two more tracks, or raised or lowered for new grade separations, much of the pre-existing OCS system may have to be demolished and rebuilt in many long segments. This is because the exact future configuration of a multi-track line has not been determined. Construction staging of any future track shooflys (detours) will have to be provided with temporary OCS facilities, then the OCS rebuilt again. (One possible mitigation may be to obtain diesel locomotives to pull trains during construction so the OCS can be abandoned, demolished and rebuilt). All of this will add to the cost of high-speed rail and so diminish its feasibility.

    A better way to promote future high-speed rail would be to use any available funds to extend the four-track segments and to add grade separations. This would also have more direct and immediate benefits for *Caltrain* express train service and public safety. Only afterwards or concurrently should the need for electrification be addressed.

11. ***Consideration of Reasonable Alternatives:*** The DEIR contains a copy of a City of Sunnyvale letter of September 15, 2000 on the scope of the analysis, bound into an

appendix. That letter states that there should be *'a reasonable range of alternatives'*, including light rail (LRT), addressed in the JPB study. This did not happen.

Information in the DEIR indicates that electrification by conversion only to electric locomotives but not to multiple unit (MU) self-propelled electric cars, would probably fail to achieve many of the original project goals. Based on the report, it seems that suitable MUs are not available in a configuration (double deck cars) that the JPB believes that it needs. Nor is there sufficient funding identified for full MU conversion.

If MUs are not acquired, then there are much reduced benefits to the project. The report failed to analyze all the operational and cost differences, advantages and disadvantages between MUs and electric locomotive-hauled trains.

But if MUs are desired as the goal, then light rail vehicles (LRVs) should also be an alternative, because the entire *Caltrain* fleet would then need to be replaced. As it currently is reported, fleet replacement with electric locomotives and new bi-level coaches is the preferred alternative. LRVs are now available with 65 mph speed capabilities, and there are examples in Europe that have much more attractive passenger amenities than any in use in North America. Light rail would have the following advantages:

- Smaller crewing requirements, hence;
- Ability to run more frequent service at lower cost
- Potential through-running of LRV trains from Santa Clara VTA lines to San Francisco MUNI lines, and;
- *Caltrain* could get to SF downtown by sharing the proposed MUNI subway, instead of a separate mega-project to the Transbay Terminal
- Potential for future LRT spur line development to major activity centers such as Stanford University and the airports, etc.
- Less costly grade separation, due to steeper hill-climbing ability
- Faster emergency stopping ability with electromagnetic track brakes

- More convenient handicapped/ wheelchair access

There are also disadvantages and complexity of course, to this or any alternative. There should be a public debate on the subject, however. The FEIR shall include an analysis of an LRT alternative, as requested in the scoping letter sent by the City of Sunnyvale September 15, 2000.

The option to extend BART shall also be considered as a reasonable alternative. BART has already reached south to Millbrae. BART is also under preliminary design to San Jose and up to the City of Santa Clara, almost to Sunnyvale. This was after Santa Clara County voters recently endorsed BART development. So the remaining gap in BART is much reduced since the last study of its extension to the Peninsula. The level of investment in *Caltrain* electrification will likely by policy and public opinion preclude any investment to extend BART on the Peninsula. The FEIR shall include a discussion of extension of BART as an alternative for providing the benefits attributed to electrification, in order to adequately and comprehensively inform decision makers and the public for this major reconfiguration of the Peninsula rail service.

12. ***Caltrain Improvement Priorities:*** The City of Sunnyvale, other cities, *Caltrain* riders and the public (and high-speed rail also) might be better served if the monies contemplated to be spent on this project were instead applied to an accelerated program of full grade separation along the line. This will address current and anticipated train operation and traffic issues at grade crossings; address train and crossing noise issues both current and anticipated; and best facilitate future high speed rail. At a minimum, grade separation and accommodation of future high speed rail shall be accomplished concurrent with electrification.

Thank you very much for your consideration, please contact Jack Witthaus, Transportation and Traffic Manager, with any questions at (408) 730-7330 or jwitthaus@ci.sunnyvale.ca.us.

Sincerely,

John N. Howe
Mayor

V Transit Agencies

DUNT MAY 03'04 PM 3:40

JPA

Transbay Joint Powers Authority
201 Mission Street • Suite 1960 • San Francisco, CA • 94105-1858

Mario Ayerdi, Executive Director

April 21, 2004

Mr. Michael Scanlon
Executive Director
Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
San Carlos, CA 94070

Subject: Caltrain Electrification Program
Environmental Assessment/Draft Environment Report

Dear Mr. Scanlon:

On behalf of the Transbay Joint Powers Authority, I would like to thank you and the Peninsula Corridor Joint Powers Board for the opportunity to comment on the Caltrain Electrification Program Environmental Assessment/Draft Environmental Impact Report. We fully support your efforts to electrify Caltrain and look forward to working with your staff in the months ahead in the fulfillment of this very worthwhile objective.

Since the Transbay Terminal/Caltrain Extension Program will affect the existing Caltrain operation, and therefore at least the north end of the Caltrain Electrification Program, we will need to coordinate our respective design and construction management activities.

Following are some of the areas that will require close coordination during the design, construction, testing and startup periods:

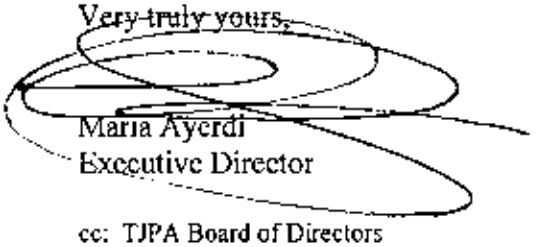
- Layout and design of the affected trackage
- Layout and design of the storage and maintenance facility at 7th and Townsend
- Layout and design of the traction power system including the design and placement of parallel stations
- Layout and design of the overhead contact system
- Layout and design of the signal system
- Utility workaround and relocation
- Final inspection and testing of the systems affected by both programs

In addition, we are interested in keeping abreast of rolling stock decisions, including use of dual mode locomotives, since changes of vehicle type could affect our clearances, platform dimensions, etc.

If our construction programs overlap, it will be important to jointly organize and stage our respective activities to minimize their effect on the existing Caltrain passenger rail service.

You may count on us as strong supporters of the Caltrain Electrification Program. We would be happy to answer any questions you may have and look forward to our continued cooperative working relationship.

Very truly yours,



Maria Ayerdi
Executive Director

cc: TJPA Board of Directors

Electrification

From: jlayton@bart.gov
Sent: Tuesday, May 25, 2004 4:36 PM
To: Electrification
Cc: RAvery1@bart.gov; JDunn@bart.gov; lhardy@bart.gov
Subject: Comments of EA/Draft EIR--Caltrain Electrification Program

Thank you for providing the San Francisco Bay Area Rapid Transit District (BART) with an opportunity to comment on your April 2004 Caltrain Electrification Program Environmental Assessment/Draft Environmental Impact Report by the FTA. Mr. Roger Avery with BART's Engineering Department reviewed the document and requests your consideration of the following comments.

1. The report does not address the ElectroMagnetic Interference (EMI) from the Catenary System to BART train control and non-fiber communications circuits or to PacBell and possibly other utility company communications lines. This EMI will cause noise between conductors and a longitudinal voltage to ground. The Auto-Transformer Traction Power Feeding System does mitigate some of the EMI but the actual amount is totally dependant on the spacing between the Auto-Transformers and the location of the train or the fault. The longitudinal induced voltages may become dangerously high (perhaps as much as 5000 volts per mile if Auto-Transformers are 1 mile apart as is typical) in the event of a catenary fault. The costs of additional mitigation to eliminate the affects on BART Train Operations may be substantial as may be PacBell's and other's wire phone lines.

2. The report also does not address the effects and mitigation of any corona discharge from the catenary system to radio and television receivers in the area. This should be negligible unless there is any damage during construction to the high voltage conductors or hardware.

3. The report does not address the increase in time that the grade crossings are "occupied" by the trains as the number of trains increases due to the popularity of the service. This increased occupation time also increases as the speed increases due to the increased warning time given to road vehicles and increased braking distance of the trains. Any increase in crossing occupation time will increase local air and noise pollution and the number of grade crossing accidents as people become frustrated with the wait time.

4. The statement on page 3-98 that "Impacts (of noise) from Train Horns and Crossing Bells ..... would not change due to the Electrification Program" is not correct. The sounds will increase in duration and more locations will be affected due to the higher speeds and the longer distance away from the Grade Crossings that the horns must be blown. This of course may be some what offset by the reduction in locomotive noise but the necessary strident sound of the Horns and Crossing Bells is generally more annoying than the diesel locomotive sound. The anticipated increase in the number of trains will also directly increase the overall duration of the noise making it more objectionable to local residents and workers.

Thank you for considering our comments.

Sincerely,
Janie L. Layton
Manager, Environmental Compliance

SAN FRANCISCO MUNICIPAL RAILWAY
1145 MARKET STREET, 3RD FLOOR, SAN FRANCISCO, CA 94103-1547
(415) 934-3954 FAX (415) 934-3930

Erik Ólafsson, Senior Planner
Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
San Carlos, CA 94070

June 3, 2004

Dear Mr. Ólafsson:

The following are Muni's comments on the EA/Draft EIR for the Caltrain Electrification Program:

1) Page 1-1 — The four goals listed as the primary purposes of the program are good, however it seems to us that the ultimate purpose of the Electrification Program is to provide a more desirable service that attracts higher ridership levels. It would be good to have this reflected more prominently in the Purpose section.

2) Page 1-14 — In Section 1.3 – Other Related Projects, include a description of Muni's planned rerouting of the 22-Fillmore trolley coach line via 16th Street between Kansas and 3rd Street, to a new terminal in Mission Bay. This project will reroute 22-line electric trolleycoach service to operate on 16th Street, crossing the Caltrain tracks at grade. Muni is committed to this project by the City's Mission Bay Agreement with Catellus. Subject to funding availability, Muni expects to begin design work on this project between 2005 and 2009. Muni staff has taken some initial conceptual looks at what would be required to have a trolleycoach line electrified with 600v DC overhead cross a mainline rail line electrified at 25kv AC at this point, and the challenges are significant from both the technical and operational perspectives. The two agencies will need to work closely in developing this project in the future.

Page 2-7 — In Section 2.3.2.1 – Overhead Contact System, include a description of what would be required to have the 22-line trolley coach overhead intersect the Caltrain OCS.

Please call Duncan Watry on my staff at (415) 934-3937 if you have any questions.

Sincerely,

José Cisneros
Deputy General Manager for Capital Planning & External Affairs

cc: Michael Burns
Peter Straus
Vince Harris
Duncan Watry

SANTA CLARA
Valley Transportation Authority

June 30, 2004

Peninsula Corridor Joint Powers Board
P.O. Box 3006
San Carlos, CA 94070

Attention: Carol Wolf

Subject: Caltrain Electrification Program EA/DEIR

Dear Ms. Wolf:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the environmental document for the project referenced above for electrification of the entire Caltrain line from San Francisco to Gilroy. We have the following comments.

Page S-1 and 1-1: Acceleration and deceleration travel time reduction benefits should be quantified.

Page S-3: The statement is made that electrification facilities would be designed "to accommodate" High Speed Rail (HSR) service as well as Caltrain and freight service. In order to accommodate HSR, Caltrain's electrification project would need to grade separate and four-track the railroad. That effort is not addressed in this document and could not be accomplished within the funding shown in the EIR.

Pages S-7, 1-15, 2-43: It is indicated that Caltrain will retain diesel locomotives for operating service for Dumbarton and Salinas. Would passengers be forced to transfer in Gilroy (to electric trains) from the Salinas trains, thereby eliminating thru trains, or would these diesel trains continue on to San Jose and points north along the electrified Caltrain line? Would these diesel services experience higher operating costs because the vehicles and possibly the crews would not be integrated with the mainline service? Would Dumbarton train passengers also be forced to transfer to electric trains?

Page S -20, Section S.8. page 1-15 and page 2-44: Union Pacific Railroad (UP) will need to approve electrification of their right of way from Tamien to Gilroy segment. If not successful, what are the resulting changes in operating plans, costs and benefits associated with electrifying only from San Francisco to San Jose, and operating diesel trains between San Jose and Gilroy. Would Caltrain operate and maintain two separate fleets of locomotives and force transfers at Diridon station from diesel to electric trains

Page 1-4, Current and Future Transportation Demand in the Caltrain service area: There is a great deal of out of date information in this section that should be updated.

Page 1-13, Accommodating Future High Speed Rail: This section should discuss the cost and schedule implications of construction and operation of Caltrain electrification with and without, and before and after the High Speed Rail (HSR) project.

Page 1-14: Much of Section 1.3 is out of date and should be updated (e.g. Vasona LRT will open in mid 2005.).

Page 1-17, section 1.5: Please clarify the statement "will attempt to comply with local regulations affecting any of its activities outside the JPB right of way," mean? Is the JPB not required to comply with such regulations?

Page 1-19: Would not Santa Clara County need to issue a permit for construction that might impact the Lawrence Expressway overcrossing?

Page 1-19: It seems likely that there would be impacts to VTA light rail operations in Mountain View. This would necessitate an access permit and other approvals.

Page 2-22, Figure 2.3-13 and page 3-76: It is not clear from this photo if the potential site of traction power facility at Lawrence Station would impact existing park and ride. Station already has insufficient parking and shows a deficit in 2020.

Page 2-43, Section 2.3.2.6, Second paragraph: Please clarify future fleet plan mix of diesel and electric locomotives, number of diesel locomotives sold, how many will be kept. This section seems to indicate that 5 diesel locomotives will be required to operate "each" (Dumbarton and Monterey County) service, which would mean retaining 10 diesel locomotives. Later in the paragraph, it is indicated that 6 Baby Bullet locomotives would be used for these two services plus at least another 5 diesel locomotives for contingencies, equaling 11. Table 2.3-4 shows keeping only 5diesel locomotives. The Dumbarton Rail project Initial Project Report shows Dumbarton service will purchase new rolling stock, not use existing Caltrain diesel locomotives.

Page 2-45, Section 2.3.2.9: The section regarding the staging of electrification, needs more information and discussion especially in relation to grade separation projects, HSR, UP freight issues, UP control of its right of way between San Jose and Gilroy, potentially maintaining two fleets, the associated cost increases, etc.

Page 2-45 through 2-51: VTA supports the electrification of Caltrain. VTA Measure A of 2000 includes Caltrain electrification among the projects to be funded: "Provide VTA's funds for the partnership with San Francisco and San Mateo counties to electrify Caltrain from San Francisco to Gilroy." There are, however, several concerns regarding the funding, cost and timing of electrification:

- An updated plan and schedule to fund electrification in the near-term will need to be devised. Revenue from VTA's 30-year Measure A sales tax extension, which will provide VTA's share of the electrification project, will not begin to be collected until April 1, 2006. The JPB, in cooperation with the member agencies, should examine the timing, funding and prioritization of electrification in the context of a financially constrained Caltrain capital improvement program, with particular attention to the availability of funds required for this project. The recent economic downturn has created shortfalls for many transit needs in the Bay Area and, at this time, it appears unlikely that actions at the State and Federal level will result in significant amounts of additional revenue for transportation projects. For these reasons, previous funding plans and schedules for electrification need to be revisited.

- The funding plan in Table 2.3.3.2 should be revised to indicate that the VTA Board has allocated $233 million for the project and that San Francisco Measure K of 2003 provides $20.5 million of local sales tax towards their share of electrification.

- The timing of the construction of electrification will have a significant impact on its cost. Caltrain's Final Draft 2004-2033 Strategic Plan indicates "Estimates show that electrifying the railroad prior to construction of a grade separation can increase capital costs (of electrification and the grade separation) in the vicinity of the grade separation project by 65 percent." This issue needs to be addressed in the EIR. The schedule for electrification of Caltrain should be coordinated with other JPB and third party projects to implement electrification in a cost effective manner.

Page 2-45,Capital Costs: It is indicated that costs are net of the estimated revenue from the sale of surplus equipment, which is estimated at $22 million. Net project cost would then be $602 million, which means the gross project cost is $624 million. Table 2.3-7shows the gross cost at $602 million, with $22 million from the sale of surplus diesel locomotives included in the revenue pool of $608 million. This would mean that the project cost, net of revenue from surplus locomotive sale, would be $580 million ($602 million minus $22 million). It appears that the $22 million is double counted.

Page 2-49, Section 2.3.3.3: Operating and Maintenance Cost is based on an April 2001 Service Plan that was never approved by the JPB and is out of date. This information should be updated.

Page 2-51, Section 2.34.3.3: The statement is made that "It should be noted that reductions in service of both SamTrans and Muni anticipated with the increase in projected Caltrain service would result in operating cost reductions for these transit operators." Have SamTrans and Muni adopted plans to reduce service with increased Caltrain service? What level of service cuts have SamTrans and Muni have identified and what is the resulting cost savings?

Page 3-17: The discussion of mitigation measures indicates JPB will "consider" replacement of trees, including potentially, heritage or other significant trees. There should be a stronger commitment to do so.

Page 3-27: The EIR should identify projected future regional (and corridor-level) ambient air quality with and without electrification, and project the status of compliance with federal and state ambient air quality standards with and without electrification.

Page 3-11, Table 3.12-5: The location of property acquisition should be specified and the business to be displaced should be identified.

Page 3-115: This table, prepared in 2001, is out of date (e.g. There is a Santa Clara Police Department station located next to Santa Clara Station)

Page 3-121, Table 3.15-1 lists VTA as the source. VTA was not the source for this information regarding Muni and SamTrans service. This table is out of date and should be updated (e.g. VTA's Tasman West light rail line serves the Mountain View Caltrain Station, but isn't listed, ACE and Capitol Corridor train services are not mentioned and the VTA bus routes have changed significantly over the last few years.) Similarly, the corresponding narrative on page 3.124 should be updated.

Page 3-123, Table 3.15-2 should be updated, as it is a compilation of headways from an April 29, 2001 timetable and the February 2003 ridership report.

Page 3-126, Table 3.15.3 shows highway traffic volumes from the year 2000, and should be updated.

Page 3-128, Section 3.15.4 should be revised to note that the Morgan Hill Station has bike lockers. Also note that all VTA buses and light rail vehicles also have bike racks.

Page 3-128. Section 3.15.5 (and Section 1.3.): Future rail and bus and projected impacts other related projects: No mention is made of the BART to Santa Clara County project, which was approved by the voters of Santa Clara County in November 2000, which will parallel the Caltrain alignment between Santa Clara and downtown San Jose. An EIR/EIS has been circulated and

preliminary engineering is underway that includes the location and conceptual design of the route alignment and station facilities in Milpitas, Santa Clara and San Jose. The electrification EIR needs to address potential conflicts and coordination regarding integration of these two systems, particularly at the Santa Clara Station and in the San Jose Diridon Station area.

Similarly, there is no discussion of future service increases planned by ACE and the Capitol Corridor, which plan to operate additional trains serving both Santa Clara and San Jose Diridon Stations. The Future Rail and Bus Transit and Projected Impacts section also does not address the future High Speed Rail project, the Dumbarton Rail service (which is intended to operate on Caltrain tracks and serve Caltrain stations), service from Monterey County and UP freight service. These future projects, services and actions should be discussed and analyzed for synergy, conflict, safety and ridership impacts, examining the Electrification project's impact on these other services and the other services impacts on electrification.

Page 3-129, table 3.15-5: Projected boardings for many stations are very questionable. The projected San Martin daily boardings decrease from 281 in 2003 to 32 in 2020 appears to be in error in the absence of any explanation. Similarly, the projection that College Park Station ridership will increase from 380 to 1,521 seems incorrect given the very few trains that actually serve the station at this time and are expected to service this station in the future. Further analysis should be done and additional narrative should be added to explain projected ridership changes that appear incorrect, including projected future ridership with and without electrification at Baby Bullet and other stations.

Page 3-130: The travel time savings discussion needs to be clarified to quantify travel time savings onboard Caltrain trains for a series of station parings for Baby Bullet, Limited and Local service. This data should be in addition to data in Table 3.15-6, which show door-to-door time savings from central city to central city.

Page 3-134, Section 3.15.7: The statement that parking impacts have "no adverse impact" is not substantiated. The assumed parking increase of 3,258 is not contained in any Caltrain JPB-approved capital improvement program. There is no discussion of a station-specific parking plan for providing additional spaces. The chart shows a demand for parking at Mountain View of 2,943 spaces. It is unclear where and how this amount of parking will be provided.

Page 3-135: Some station parking demand projections for 2020 are lower than current use-Tamien 108 vs. 176, San Martin 14 vs. 79, Sunnyvale 204 vs. 209 are examples. These appear incorrect.

Page 3-136, Section 3.15.8 should be updated to indicate that Baby Bullet trains currently in service only provide space for 16 bicycles.

Page C-79: VTA had requested a discussion of electrification's impact on our AFO track circuits in our NOP comments. This has not been addressed in this document but should be addressed in the final EA/EIR.

Thank you for the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

Roy Molseed
Senior Environmental Planner

RM:kh

cc: Frank Sharpless, VTA
Ann Jamison, VTA
Julie Render, VTA
Samantha Swan, VTA

VI Associations and Organizations

AMERICAN LUNG ASSOCIATION®
of Santa Clara-San Benito Counties

DULMT MAY03'04 PM 8:40

To Whom It May Concern:

I am writing on the behalf of the American Lung Association of Santa Clara-San Benito Counties to encourage Caltrain to move forward with proposed plans for converting your diesel trains to electric power.

Diesel fuel is a known carcinogen and plays a role in America's dependence on foreign fuel. Studies finds that California residents on average face a one - in - 1,686 risk of getting cancer from pollutants in the outdoor air, which is 593 times greater than the one-in-one-million health-protective standard established in the Clean Air Act. Eighty-eight percent of this added cancer risk is from the filthy soot released by diesel-powered trucks, buses, construction, and farm equipment.

California has the highest emissions of diesel soot nationwide. Diesel soot has been linked to lung cancer and triggers asthma and other respiratory effects. The fine particles in diesel soot also can exacerbate existing heart and lung disease, cutting short tens of thousands of lives each year. In California, construction equipment and other non-road diesel engines released 59% of diesel emissions in 1996; the remaining 41% of emissions were from trucks and buses.

Electric power is environmentally safe, affordable and domestic. While some opponents of an electric Caltrain might complain that electrical wires are unsightly, the image of one of their children suffering from a diesel-induced asthma attack should cause them to cringe even more.

Again, the ALASCSBC greatly encourages that Caltrain move forward with their removal of diesel-powered trains. A recent EPA report has once again stated the Bay Area needs to clean up its act concerning the state of our air. Clean air is needed now, for our children, for our communities, for ourselves.

Thank you,

CHAPTER PRESIDENT

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www.lungsrus.org

Electrification

From: Margaret Okuzumi [okuzumi@silcon.com]
Sent: Tuesday, May 25, 2004 4:47 PM
To: Electrification
Subject: comments on Electrification DEIR

Bayrail Alliance
3921 East Bayshore Rd
Palo Alto, CA 94303

May 25, 2004

Attn: Carol Wolf, Program Manager
Caltrain Electrification Program
P.O. Box 3006
San Carlos CA 94070-1306

RE: Electrification DEIR Comments

Dear Ms. Wolf:

We are writing to submit our comments on the draft Caltrain Electrification Environmental Impact Report. We have strongly supported the Electrification project for many years and are pleased to see it move forward.

We feel that it is important for the electrification program to acknowledge related benefits that could be made possible by the program. These include reduced dwell time at stations, intangibles such as a modern and attractive image, new and modernized equipment with amenities such as laptop outlets that appeal to commuters, greater reliability and operational benefits for increasingly frequent service.

We'd like to see the following items addressed in the final EIR:

· Analysis of costs of electrification to Tamien instead of to Gilroy. Electrifying all the way to Gilroy doesn't make sense, until a much greater frequency of train service becomes standard on the Gilroy extension. Even VTA board chair Don Gage, who represents southern Santa Clara County and Gilroy, is on record as saying he doesn't think electrifying to Gilroy makes sense. Gage feels that increased service levels would better serve his constituents and would rather see electrification monies for the Gilroy extension directed to other infrastructure improvements to permit greater frequency of service to Gilroy. Gilroy extension service operations could perhaps be combined with future planned diesel service to Salinas.

· Analysis of feasibility of electrifying to Palo Alto. Given the reticence of VTA to fund Caltrain electrification until they have come to some resolution over the BART to San Jose project, it may be necessary to terminate electrification in Palo Alto. We'd like the EIR to examine the costs of this.

· Fuel pricing and savings. Please include a discussion of the expected future volatility of the price of diesel fuel vs. electricity, and whether electrification has the potential to provide large operational cost savings as a result.

· Time savings possible with EMUs and total passenger car replacement. The time savings benefit of the electrification project is presented as being the same regardless of the type of equipment chosen. However, we feel that dwell time at stations could be reduced considerably if new equipment provided level boarding and more doors, resulting in a significant benefit. The time savings, coupled with the added speed provided by electrification, may provide Caltrain with significant additional operational savings. We would like to see this analyzed in the EIR.

· Operational savings possible with EMUs. We'd like to see a discussion of the reduced operating costs that may be possible with EMUs vs. electric locomotives. One advantage of EMUs is greater operational flexibility and ability to realize savings in operating and

maintenance costs from varying the consist size to match passenger load (such as running shorter trains during non-peak hours).

· Freight and FRA compliance. We urge you to avoid following the example of the Northeast Corridor. Please consider whether it would be possible to obtain an exemption from FRA requirements for Caltrain equipment, which would permit Caltrain to obtain suitable and proven electrified rolling stock much more cheaply and competitively.

· FRA does allow temporal separation to permit non-FRA equipment and FRA compliant equipment to use the same track. Caltrain could explore temporal separation that many LRT agencies use to separate freight trains and LRTs along the same tracks. Caltrain should also consider different versions of separation, such as dedicating one track for freight use at night and maintain a two-way passenger traffic on another. Given the small amount of freight traffic on the Caltrain line, the ability to implement technologies, such as positive train control or automatic train stops, and operating rules to separate the two types of equipment, we believe a strong case could be made for the FRA to grant Caltrain an exemption from purchasing FRA-compliant equipment. This could save Caltrain hundreds of millions of dollars in operating cost as well as equipment cost.

· Elimination of freight. Would it be possible to eliminate freight service from the Caltrain line, and what would be the environmental and revenue impacts? It seems to us that the potential savings that Caltrain could realize with the ability to purchase non-FRA equipment, and benefits from the ability to provide platforms designed for level boarding, would greatly outweigh the revenue loss from eliminating freight.

· Grade separations. A common question that has come up is whether electrification will increase the cost of future grade separations. We believe that most of the costs of electrification are due to the substations and equipment, rather than the actual wiring at grade crossings. We don't think that electrification will add significantly to the cost of future grade separations, but please address this issue in the EIR.

· Grade separations at 16th Street and Common Street in San Francisco. We are concerned that grade separations are required at these intersections to avoid disasterous interference from planned Muni trolley operations.

· Substations. Given additional miles of electrified line on multiple tracks, as Caltrain expands to a quadruple-track line and increases service, will additional substations be necessary?

· Electrification and HSR. There is a great deal of confusion in the community over the relationship between these two projects. Some seem to have the impression that if we wait long enough HSR will electrify the line for Caltrain, and that to do so earlier would be a "waste". We think it would be helpful for you to discuss these issues in the EIR. We'd like to point out that the complete operating/business model for California HSR is not determined yet. One business model may be for an electrified Caltrain line to rent out access to the corridor to HSR in return for revenue. In Japan, HSR makes money and subsidizes over a dozen commuter/feeder lines.

· Growth impacts. We feel that electrification will encourage more residential development near stations, since noise and air pollution impacts will be greatly reduced, and that this will result in additional riders for Caltrain.

· Lastly, we'd like to emphasize the huge benefit that electrification will provide to neighbors of the line. While some are concerned about aesthetic impacts, we'd like to point out that rarely will people be gazing directly at the lines and that mostly they will be hidden by trees, buildings or other objects. In our experience, people become oblivious to the presence of telephone wires, light rail and electrified trolley wires as they blend into the visual landscape. Also, we feel that the huge reductions in noise and air pollution that electrification would provide are significant benefits that should not be overlooked by neighbors.

Thank you for your consideration of these comments. We also urge your careful attention to the detailed technical comments submitted by Richard Mlynarik and Michael Kiesling.

Sincerely,

Margaret Okuzumi

Electrification

From: HCARTAWAY@aol.com
Sent: Tuesday, May 04, 2004 3:46 PM
To: Electrification; don.gage@bos.co.santa-clara.ca.us
Cc: ksimpson@greenbelt.org; jfitchen@greenbelt.org
Subject: Support For Electrification of CalTrain

Please record this e-mail message from my organization and I as support for Santa Clara County Supervisor and CalTrain Board Member Don Gage's recommendation that CalTrain electrify its equipment, and particularly that rolling stock operated through Southern Santa Clara County.

Gilroy, Morgan Hill, and San Martin have the worst or near worst air quality currently among all cities within the nine county Bay Area Air Quality Management District, owing to prevailing north to south wind patterns and geography. Solid particulates that are carcinogenic, such as those as are emitted in large quantity by diesel locomotives, wood fireplaces, or trucks and buses, are high or very high on many days throughout the year in this region.

A recent study published by the University of California indicates that school districts located within the most polluted regions of the state, are experiencing higher student absences, reduced corresponding state revenue reimbursements, and most importantly, negatively impacted childhood health statistics. Asthma, allergies, and other respiratory ailments are most pronounced in children in this region. CalTrain tracks lie within walking distance of nearly every school here.

Passenger trains operated in Southern Santa Clara County that may in the future be powered by electrical energy generated with cleaner fossil fuel fired generating methods - such as natural gas, or even better yet solar, wind, or hydro power, will benefit all residents of South Santa Clara County, and particularly children. Incidental increased living standards, higher property values, and penultimately a cleaner environment are all major benefits that all those that breathe in Santa Clara Valley deserve and CalTrain can today help provide.

Thank You

****

Christopher M. Coté (ko-tay)
Chairman & CEO
Hollings Cartaway Hunger-Relief Foundation
Founder & Executive Director Concerned Neighbors of Gilroy
1515 Welburn Avenue
Gilroy, California 95020-3739
USA

fax 408.848.1145
cell 831.320.8702

The Hollings Cartaway Foundation (Organization) was established under the laws of the State of California.

Electrification

From: Bob Kelly [rmkelly361@earthlink.net]
Sent: Tuesday, May 25, 2004 10:27 PM
To: Electrification
Subject: Comment on the EIR covering Caltrain Electrification

This evening(25 may 2004) I attended a meeting of our homeowners association where the subject of electrifying the train system runs from San Francisco to San Jose was a major agenda item. At this meeting I became aware that today is the deadline for submitting comments to you concerning this subject. As the newly elected President of the Felton Gables Homeowners Association, I feel obligated to express a grave concern over the current plan. In effect, this plan will have a direct negative impact on our neighborhood, which abuts the train tracks in Menlo Park. The loss of trees and the general ugliness of an overhead superstructure is considered unacceptable by me and all others that attended our meeting. Our homeowners organization is comprised of over 180 adult residents. I am confident, if sufficient time was available, all 180 would respond in the manner that I have. We hope that Caltrain will develop an alternate solution that is compatible with our environment

Sincerely,
Robert P. Kelly
379 Lennox Ave.
Menlo Park, CA 94025

COUNTY COUNCIL
LEAGUES OF WOMEN VOTERS OF SAN MATEO COUNTY
444 Peninsula Avenue, Suite 1, San Mateo, CA 94401-5853

May 1, 2004

Erik Olafsson, Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
P. O. Box 3006
San Carlos, CA 94070-1306

RCVD MAY 03 '04 AM 8:39

Comments on Caltrain Electrification Program
Environmental Assessment/Draft Environmental Impact Report

Caltrain is an important link in Bay Area multi-modal transit networks. As such, it must provide service that is efficient, convenient, cost-effective, equitable, and safe. It must also be planned in concert with land use and viable alternatives to reduce vehicle miles traveled and single-occupant vehicle use. There must be a variety of funding sources available for both capital and operating costs.

We have studied the EA/DEIR with these criteria in mind. Since the system is already in place and operating with diesel power, the Primary Purposes of the Electrification Program must be demonstrated to be workable and effective. There must be substantial measurable improvements beyond the improvements planned for No-Project.

The document makes a good case for several benefits resulting from electrification. Incontestably, the biggest and most important advantage of electrification is the reduction in energy use and consequent improvement in regional air quality. The calculations are impressive and convincing, if they accurately represent the technology that will be available for electrification compared to diesel or other fuels at the time of implementation.

However, we are disappointed by the lack of comparative information in this document, the inconsistencies between this document, the Transbay Terminal EIR, and the Caltrain Strategic Plan for 2004-2023, and the apparent very limited improvements in travel time and ridership induced by electrification compared to No-Project.

We recognize that the document is an examination of the impacts of Electrification from 4th and Townsend to Gilroy, but are surprised that there is NO discussion of continuing the use of diesel along this distance while using electrification for the extension from 4th and Townsend to the Transbay Terminal by means of dual-mode locomotives. This is discussed in the Transbay Terminal EIR, page 2-3 (the $235 million cost was counted as an additional cost for the Transbay Terminal project). The equipment discussed as alternative options is limited to replacing diesel locomotives with electric, use of all EMU vehicles, or replacement of diesel locomotives with electric and replacement of all the gallery cars. Each option retains a "limited" amount of diesel service, for Dumbarton, Salinas, Monterey, and freight. Although the limited use of dual-mode locomotives could be regarded as the No-Project alternative, it should also have been considered as one of the options for new equipment (cost is between that of new electric locomotives and EMUs) for a

project that is not going to happen in time for the Transbay Terminal completion. The Caltrain Strategic Plan, page 30, states that electrification funds "will not be available until 2014."

TIME FRAME

This brings into question the tables that compare electrification system costs for 2008 and 2020, and the ability of Caltrain to complete the electrification program and increase the trains/weekday as projected in this EA/DEIR. While it may be a worthwhile exercise to look at this time period, the projections should be updated to the (probably) more realistic figures in the Caltrain Strategic Plan, where the Moderate Growth scenario projects electrification in 2018, with only 100 weekday trains.

COSTS

We are concerned about costs. Table 2.3-9, Caltrain Operating and Maintenance Costs with Electrification, provides costs for Basic and Express Service for 2008 and 2020, Incremental Cost of Electrification, and Total Operating and Maintenance Expense. Since Table 2.3-8 tabulates diesel for 2001 and ONLY Electric service for 2008 and 2020, we must conclude that Basic and Express in Table 2.3-9 are for Electric only. Therefore, we are unable to compare the O & M cost of diesel service to the cost of electric in this section. Furthermore, the first two items in the 2008 column do not add up to the Total O & M Expense figure, although the column for 2020 does total correctly. It would be helpful to again (in Table 2.3-9) have a column for 2001 diesel for comparison. These tables must be clarified.

The energy use of diesel is compared to electrification in Table 3.10-1 for 2008 and 2020, but again, there is no cost comparison based on 2003 dollars. It may be difficult to project future costs of electricity and diesel fuel, but at the minimum, costs should be stated based on present rates in order to make a base line comparison of Operating and Maintenance costs. Based on energy consumption, energy costs should be overwhelmingly in favor of electrification. However, page 2-51 states that O & M costs are higher for electrification than for diesel due to cost of labor and materials for maintenance of the many additional components needed for Electrification. There should be separate columns in the table for [energy] and for [labor and materials] for both diesel and electric systems for 2008 and 2020 in order to have an accurate comparison of No-Project and Electrification.

FLEET REQUIREMENTS

Table 2.3-4 defines Fleet Requirements for Electrification for 98 and 132 trains/weekday. Rolling Stock Options 1 and 3 define the costs of replacing diesel locomotives and passenger cars (Table 2.3-6) for Electrification System Costs. Data are lacking for cost of replacement of rolling stock for No-Project. Would there be NO replacements AND no new equipment needed to provide 132 trains/weekday in the No-Project scenario? If there would be equipment cost for No-Project, this needs to be included in the comparison of No-Project to Electrification so that the incremental cost is clearly stated.

RIDERSHIP AND TRAVEL TIME

Ridership and Travel Time improvements are very insignificant for Electrification compared to No-Project. An increase of 4118 passengers (Table 3.15-5) and reductions of 2-4 minutes of travel time (Table 3.15-6) are not cost-effective

justifications for a $1.0 billion project. However, these figures must be reconciled with the travel times (Table 3.1-16) in the Transbay Terminal EIR; both claim to use the same Parsons September 2001 source, but the Transbay Terminal EIR time savings are 14-15 minutes for most trips. The public will quickly compare the $1.5 billion cost of BART to SFO and its projected 70,000 passengers (yet to materialize) and decide that Caltrain electrification would cost too much. While Caltrain may argue that its cost/mile is far less than for BART, there should be an "apples to apples" comparison. How much rolling stock and at what cost was included in the BART project cost? Even without rolling stock, electrification would cost $456.69 million. There must be a table of average annual cost/rider and cost/new rider, as in the Caltrain Strategic Plan, and an explanation of how these costs are calculated, for both No-Project and Electrification. This would clarify the cost of the improvements necessary to upgrade the system for No-Project and the added cost for Electrification. The Caltrain Strategic Plan shows that the major cost/new rider is for the status quo upgrade. It also projects a much larger difference in ridership due to electrification. This discrepancy must be explained.

Do the ridership projections take into account new riders resulting from feeder service on Dumbarton, Salinas, and Monterey lines/extensions? Provide a table showing these figures, with projected dates for these added services.

At the September 2000 Scoping meeting in San Carlos, there were requests from the audience for inclusion of BART as an alternative electric service. Section 2.4 discusses Alternatives Considered and Withdrawn; 2.4.4 discusses Third Rail or Underground, which describes Third Rail "as used in the 1000 V DC BART system." This discussion is only an indirect comparison to BART; there is no direct analysis of BART as an alternative, as requested.

AESTHETIC/VISUAL IMPACTS vs. IMAGE

We do not agree that the Aesthetic/Visual Impacts, which local residents or business occupants may consider adverse, will be sufficiently balanced by decreases in noise and air emissions to be considered an offset that would warrant a statement that the project would not introduce visual elements that are out of character for the neighborhood. Since there will be tree trimming and removal in some areas, exposure to noise and emissions could be more significant for these parts of the Right of Way than for other locations, in addition to the impact of newly added "visual clutter" due to the new poles and wires. The more modern "image" of the train becomes a triviality in this situation.

MODERNIZE CALTRAIN

This document states that one of the primary purposes of the Caltrain Electrification Program is "Modernize Caltrain." This comes across as an "image" issue at least as much as a service/technology issue. It also states that the "facilities would be designed to accommodate high-speed rail service." The supporting pages that discuss electrification improvements do not clarify whether or not additional facilities and systems will be needed to "accommodate" high-speed rail. Would a separate track system be required? What portion of the Electrification program would NOT be needed if high-speed rail were not in the future? Since the original high-speed rail schedule has already been delayed by several years, how can we be sure that Electrification Non-Rolling Stock improvements (Table 2.3-5) will be technologically appropriate and adequate for

high-speed rail? If the case for Electrification can not stand on its own, quite apart from high-speed rail, the enormous cost to the JPB member agencies can not be justified. If high-speed rail does eventually utilize the Peninsula corridor, what service impacts will Caltrain experience?

SEPARATED RIGHT OF WAY

Has there been a study of use of diesel locomotives on a completely separated Right of Way (cross streets either grade separated or completely blocked) to determine how much faster service would result because of eliminating speed restricted zones? If high-speed rail is a realistic major planning consideration for future operations, there should be consideration of Right of Way separation as a first step, with Electrification to follow when high-speed rail requirements are better known and could provide funding for many of the needed Non-Rolling Stock improvements. If end-to-end train times could be significantly improved by separation beyond the insignificant 8 minutes (Table 3.15-6) expected, the train would be more likely to attract new riders, with either diesel or electric service.

NOISE

Although Noise during electrified train operation would be reduced from No-Project's "Impact" and "Severe Impact" levels created by the train sets, there would still be the same noise impacts from train horns and crossing bells, which, although mentioned on page 3-98, are not tabulated in any table. Would total grade separation eliminate these impacts?

COST/BENEFIT ANALYSIS

Caltrain must weigh the benefits of reduced energy cost and air pollution against the cost of very small increases in ridership and very small reductions in travel time if the information in the EA/DEIR is believed to be adequate. We believe that a more thorough analysis is needed, including coordination and reconciliation with data in the Transbay Terminal EIR and the Caltrain Strategic Plan. The benefits of the Electrification program must be substantial, clearly defined, and permanent. The negative impacts caused by construction will be temporary, but not all easily mitigated. Long term, cumulative impacts DO exist. The Final EA/EIR must convincingly demonstrate that the enormous monetary cost of Electrification will be justified by large benefits for passengers, neighborhoods, businesses, the economy, energy consumption, travel time, air quality, and compatibility with other regional transportation systems, as well as providing a more modern type of transit vehicle.

We request that you address our concerns in the development of the Final EA/EIR. We want to see the most cost-effective use of scarce transit funding resources. We support the use of electric energy instead of diesel because of its projected lower energy usage and its beneficial impact on air quality. These benefits, however, are not accompanied by reduced travel times, which would directly benefit Caltrain passengers and improve ridership. More study is required to determine how to further reduce travel time and how to attract more riders so that the cost of the Electrification Program can be considered cost-effective as well as energy efficient.

Linda Craig, County Council Coordinator
Judy Orttung and Onnolee Trapp, Transportation Co-chairs

Electrification

From: Henry Riggs [henryriggs@earthlink.net]
Sent: Monday, May 03, 2004 3:19 PM
To: Electrification
Subject: questions

Dear Caltrain,

It seems like a great idea to electrify the corridor. I'm concerned, however, about two aspects of impact on our environment.

First, will the power line be overhead and visible, or under the track?

Second, the electrical power that will be added to the current loads has to come from increased capacity. Currently, PG&E and others exhaust all wind, solar and hydro power first, then gas and oil and coal. Will much of this added load be coal generated?

With Thanks,

Henry L. Riggs
Lorelei Homeowners Association

April 30, 2004

DOCUMENTS RECEIVED

Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
San Carlos, CA

Subject: Comments on the Caltrain Electrification Environmental Assessment/Draft Environmental Impact Report (EA/DEIR) dated April 2004

Thank you for the opportunity to comment on the Caltrain Electrification EA/DEIR dated April 2004. In my opinion, the document does not make a compelling case for electrification. True, there are air quality benefits due to reductions in energy use, slight improvements in travel times, and minor increases in ridership, but do those benefits outweigh the high costs, the visual clutter along 80 miles of corridor, the disruption of service during construction, and the construction impacts on businesses and residences along the corridor? Increased level of service can be achieved without electrification, alternatives such as LNG or "clean" diesel are available that can achieve the air quality improvements (Section 2.4.1, p. 2-51), and the major noise impact of train horns and crossing bells can be reduced through a systematic reduction in the number of grade crossings on the corridor.

INCONSISTENCIES

There are several inconsistencies between this EA/DEIR compared to the Caltrain Strategic Plan (CSP, Dec 2003) and the Transbay Terminal EIR (TBTEIR, March 2004). Weekday ridership for a 132 train schedule in 2020 is listed as 64,000 in the TBTEIR (Page 3-33) and CSP (Table 7); as 57, 918 in the EA/EIR (p. S-13). Travel times in Table 3.15-6 in the Electrification DEIR are different by several minutes than travel times in Table 3.1-16 in the TBTEIR even though the same source is referenced. Further, these time differences exceed the claimed time savings of 2-8 minutes due to electrification. The CSP says that "funding for the project (electrification) will not be available until 2014", yet tables in the EA/DEIR show electrification in 2008, with complete buildout by 2020 and the TBTEIR says that "electrification of the Caltrain line is scheduled to be implemented by 2006 (p. 2-3)". Service levels of 132 trains/day are projected in 2020 in the EA/DEIR, while the CSP lists 100 trains/day in 2023 under the Moderate Growth Scenario (Table 6). In the EA/DEIR, Table 2.3-7 lists $602M in funding sources, a shortfall of $66M for the 2020 estimated costs, while the CSP lists a funding shortfall of $219M by 2023. Sales tax funding for electrification is listed at nearly $400M in the EA/DEIR and as a total of $209M in the CSP Table 6. This is all very confusing. Not many members of the public have access to all three of these documents, but staff certainly has access to all three, and I have difficulty understanding why these inconsistencies were allowed to happen. They should be reconciled and clarified in the final document.

COST BENEFIT RATIO

Costs are a major concern. The increased ridership in 2020 due to electrification is 4118 new riders, only a 7.6% increase for a capital investment of $668M to $1.0B and increased

operating costs of $1.6M to $3.4M/year. This works out to $146,187 to $245,850 in capital costs per new passenger and $388 to $825/per yr/new passenger in operating costs. At $8 per one way trip in six zones (the current fare), each of those new passengers could enjoy 18,273 to 30,731 "free" rides for the same cost as electrifying their ride.

Since energy cost reduction is more than offset by increased maintenance costs associated with electric locomotives and EMUs, (p. 2-50, Section 2.33) the question is whether the improved air quality and noise reduction are sufficient to justify the costs of this project.

Ridership is estimated to increase by around 8% in the Electrification Alternative, with minimal travel time savings of 2-4 minutes on most of the line (8 minutes for the Gilroy-SF trip), and has some air quality and noise benefits (p. 3-128 to 3-3-130). However, "...installation of the OCS conductors,...require night-time and weekend track occupancies, including weekend outages that would require total suspension of passenger revenue service" (p. 4-2, last paragraph). Figure 4.1-1 shows a construction period of about 30 months for OCS Poles and Wires. This is a major impact that needs to be considered carefully. Caltrain passengers have just undergone a lengthy period of no weekend service, and may not be terribly enthusiastic at the prospect of more of the same. The question is: Are the improvements in air quality, small increases in ridership and minor reductions in travel times worth the expected costs and disruptions in service that will be incurred during construction?

ALTERNATIVES NOT INCLUDED

"Clean" diesel and liquified natural gas (LNG) were the least expensive of the alternative train propulsion options considered, but were rejected because *they did not address the basic project purpose to electrify the Caltrain line or meet the project purpose to realize Peninsula commuters' vision of a modernized commuter railroad."* (emphasis added) (p. 2-51, Section 2.4.1) These alternative fuels would achieve similar improvements in air quality at lower cost, but their rejection is weakly based on a "vision of a modernized...railroad" that is not substantiated with any supporting data. The Joint Powers Board would be ill advised to accept this EA/DEIR that does not include this alternative fuel.

Similarly, grade separating the entire line was rejected because of increased costs, but those potential costs are not enumerated, so there is no basis given for comparison.(p. 2-52, Section 2.4.4) High speed rail will require grade separating the entire line. Why not address the issue of grade crossings now? Noise reduction is listed as a benefit of electrification, however train whistles will continue to be sounded at grade crossings. Improvements in safety, noise reduction, and elimination of any grade crossing downtime would certainly be compelling arguments for grade separating the line, at least in urban areas or where heavily travelled roadways intersect with the rail line.

Although not stated in the EA/DEIR, another justification for electrifying the Caltrain line is compatability of equipment with the downtown Transbay Terminal project, since existing diesel trains cannot operate underground. However, the TBTEIR states that the extension could still be implemented using dual-mode (diesel-electric) locomotives at a cost of $235M for 34 locomotives. (p.2-3, TBTEIR) Since diesel service is anticipated on the Dumbarton Rail service and Monterey-Salinas routes, why aren't dual mode locomotives considered as an alternative?

ADVERSE VISUAL IMPACT vs "IMAGE"

"Residents or business occupants, however, may consider these (placement of OCS poles and wires for electrification) visual effects adverse." (p. 3-3, Section 3.1.2.1 and 3.1.2.2) Justification for the adverse visual change is that "these types of facilities are consistent with the existing visual quality of the active commuter and freight rail." No compelling evidence supporting this statement is presented. Quantification of the number of residences and businesses affected by the visual aspects of the project should be done as part of this document. "A substantial decrease in noise and air emissions in the area due to the elimination of diesel operations may partially offset these visual changes." is a weak argument.

"Improving the appearance of Caltrain to potential consumers has long been suggested as a means of increasing ridership"(p.1-13, Section 1.24). The reference for this statement dates to a thesis written in 1972, over 30 years ago, before JPB took over train operation and improved service. It is a stretch to justify electrification as a means of improving the image of train travel. Comfort, safety, reliability of service, connectivity, cost, and convenience are far more powerful incentives to users.

SAN BRUNO STATION

"..., the poles and overhead wires would be visible in comparison with the street lighting electroliers and elevated parking structure at this location." "Construction of the poles would introduce new vertical structure visually similar in size and frequency to the existing street light electroliers along San Bruno Avenue."(p. 3-6, Downtown San Bruno,, and p. 3-7, Figure 3.1-2) These statements and the resulting figure are incorrect, since a grade separation project is in the planning stages for that location that would create a 700 foot long elevated platform that is as high as the "parking structure" (which in fact is part of an auto dealership), and the OCS structures would be on top of that platform, creating a much higher profile. The resulting profile will be similar to that shown for the San Carlos station (Figure 3.1-3), although the angle at which that picture was taken tends to diminish the actual height of the OCS. This is misleading at best.

Table 3.15-1 lists SamTrans bus routes 140 & 141 as serving the San Bruno station.(p. 3-121) The current San Bruno station at Sylvan Avenue is not served directly by ANY SamTrans route. Future placement of the station at San Bruno Avenue may be served by these routes.

There are 177 parking spaces listed for the San Bruno station (p. 3-135, Table 3.15-7). Does that represent the current location at Sylvan Avenue? The number of spaces at a relocated station at San Bruno Avenue may be less.

SAFETY

p. S-5, S.2.2.1 "the overhead contact system, however, may have to be deenergized at some overhead locations in order to operate certain freight trains....." Does this represent a safety hazard? How does the OCS get deenergized in scattered locations? Is there a fail-safe method to assure that a segment is properly deenergized??

MISCELLANEOUS CORRECTIONS

p. S-20, Table S-4, footnote 1, and p. 2-48, Table 2.3-7, footnote 1

There is no Measure B in San Mateo County. San Mateo county's Measure A which expires in 2008 generates a total of about $55M/year, of which only a portion is dedicated to Caltrain capital costs.

Figures 2.3-6 through 2.3-10, Figures 2.3-12 to 2.3-14, Figures 2.3-16 to Figures 2.3-10,

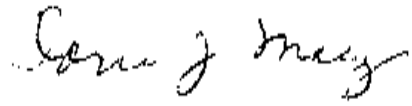
These figures have no directional legend (ie; north direction).

CONCLUSION

In conclusion, the Electrification EA/DEIR does not present a strong case for electrification of the Caltrain line. The weak arguments for improved "image", the rejection of plausible alternatives, meager improvements in ridership and travel time, downplaying the visual and construction impacts on businesses and residents located near the line, and high costs are compelling reasons to revisit the policy decision to implement electrification of the line.

Thank you for your consideration.

Sincerely yours,



Doris J. Maez
Member, Citizens Advisory Committee
San Mateo County Transportation Authority

VII Businesses

Electrification

From: Michael Kiesling [mk@arch21.org]
Sent: Tuesday, May 25, 2004 11:24 AM
To: Electrification
Subject: Comments on Caltrain Electrification DEA/EIR

From Michael Kiesling
1000 Union Street #207
San Francisco, CA 94133
mk@arch21.org

Comments on Caltrain Electrification DEA/EIR

May 23, 2004

Thanks for the opportunity to comment on this crucial project, not just for Caltrain and its passengers, but for the communities that Caltrain traverses and the entire Bay Area. Electrifying the railroad will improve train performance, remove the uncertainty of fluctuations in fuel prices from Caltrain's budget, ease vehicle maintenance, and provide a cleaner and quieter neighbor for the towns and cities the railway runs through.

Electrification Alternative, Rolling Stock Options:

The EIR should list the lifespan of Caltrain's existing rolling stock. This should include the original gallery car fleet, the second gallery car fleet, and the "Baby Bullet" Bombardier fleet. The report should consider the remaining lifespan of the equipment in the existing fleet and the lifecycle costs associated with maintaining the existing fleet into the future under the "Replace Locomotives Only" Option. List the net-worth remaining in the existing fleet to accurately show the true cost of partial or full fleet replacement.

The EIR must consider the MOU between the Caltrain Peninsula Corridor JPB and the California High Speed Rail Authority (CHSRA). This MOU covers the anticipated operation of non-FRA compliant high speeds train on the Caltrain line, in mixed traffic with Caltrain. This MOU sets the stage for non-FRA equipment to run in the corridor. The EIR must consider the myriad of EMUs and passenger equipment available on the world market when discussing fleet replacement issues, and not simply discard an equipment option due to its non-FRA compatibility.

The EIR should include simulations of operations under each rolling stock scenario to quantify the performance of each rolling stock option. This should include, if possible, the boarding performance of low(er) floor trains and multiple doors, and add this to the total time savings.

Project Alternatives:

The EIR should look at a Minimum Operable Scenario that acknowledges the financial commitments to the project. Specifically, the EIR should discuss an option that electrifies south only to Palo Alto. This would reduce the initial project costs significantly by eliminating two of the three Primary Substations and their associated Paralleling Stations and Switching Stations. It would also significantly reduce initial rolling stock acquisition costs, and approximately half of the track-miles of OCS. (Electrified equipment could be hauled to the CEMOF

in Santa Clara by diesel locomotives for heavy maintenance, with light maintenance performed at the San Francisco terminal. Existing Caltrain practices now require deadheading equipment to Oakland or Roseville for the same maintenance, the deadheadding from Palo Alto to San Jose is a small fraction of the distance.)

Electrification to Gilroy should be eliminated. Instead, service patterns that bring diesel-hauled Gilroy trains to a point north of San Jose to blend the electric and non-electric services should be assumed. The headways for service south of San Jose, combined with the UPRR ownership of the ROW and the FRA-compatibility issues make the electrification of non-JPB owned ROW very expensive and problematic. Funding would be better spent on operational improvements and upgrades to the Gilroy service, but even far-distant service levels do not come anywhere close to warranting electrification south of San Jose.

Design Issues:

The EIR should consider the use of pre-stressed concrete for the OCS poles, with respect to lifecycle costs, initial capital cost, and environmental impacts.

The EIR should consider the placement of a pair of OCS poles serving two tracks each along a 4-track ROW, as opposed to two poles with a four-track headspan.

Future Rail and Bus Transit and Projected Impacts:

The EIR should explain the feasibility of a grade crossing with MUNI's 600v dc trolleybus OCS at the 16th Street grade crossing.

Implementation Issues:

Manufactures should be identified for a possible Design Build Operate Maintain scenario, and the EIR should list recent world examples of this method of procurement.

Design should continue, regardless of project phasing or possible MOS strategies, for the entire San Francisco - San Jose project. Necessary track shutdowns for upcoming projects should allow for concurrent pre-construction activities for electrification. As the design progresses, foundations for OCS poles could easily be constructed while other work is performed.

Thanks again for the consideration of these comments on the Electrification DEIR.

-Michael Kiesling

Michael Kiesling
Architecture 21
San Francisco, CA
www.arch21.org

Pacific Gas and Electric Company

Loren Loo
Senior Project Specialist
Land Services

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RECEIVED APR 26 '04 AM 10:31

4/22/2004

Erik Olafsson
Senior Planner
Sa Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1306

Re: Caltrain Electrification Program DEIR

Dear Mr. Olafsson,

Thank you for the opportunity to comment on the DEIR for the Caltrain Electrification Program. Pacific Gas and Electric Company (PG&E) recognizes the key role which alternative mode transportation projects play in the improvement of the air quality and congestion in the San Francisco Bay Area. Projects of this nature will also help ensure the continued vitality of the Silicon Valley growth and overall economic conditions in years to come.

The DEIR indicates that electric service for this project will be provided by PG&E via existing 115 kV transmission facilities interconnecting into the Caltrain system at various locations (traction substations, switching stations and paralleling stations). We would like to note that while some discussion and analysis have been made regarding the site-specific electric facilities necessary for the operation of the system, there is no consideration given to analysis of potential impacts from any necessary extensions of PG&E's 115 kV electric transmission lines out to those sites. In addition, Table 1.5-1, "Permits and Approvals Anticipated To Be Required" makes no reference to the California Public Utilities Commission approval process for the construction of any new electric transmission line greater than 50 kV by any State regulated utility. The exclusion of adequate environmental review of such facilities in the project EIR could have a significant adverse impact upon the overall project schedule and costs.

Pacific Gas and Electric Company (PG&E) is subject to the jurisdiction of the California Public Utilities Commission (CPUC), and must comply with CPUC General Order 131-D (Order) on the construction, modification, alteration, or addition of all electric transmission facilities (i.e., lines, substations, etc.). This includes facilities to be constructed by others and deeded to PG&E. In cases where no new line over 200 kV is required and PG&E's electric facilities are part of a larger project (i.e., electric generation plant), the Order exempts PG&E from obtaining a permit from the CPUC provided its planned facilities have been included in the larger project's California Environmental Quality Act (CEQA) review, the CEQA document has been circulated to the State Clearinghouse, and the project's lead agency (i.e., California Energy Commission or local permitting agency) finds no

significant unavoidable environmental impacts from construction of PG&E's facilities. PG&E or the project developer may proceed with construction once PG&E has filed notice with the CPUC and the public on the project's exempt status, the public has had a chance to protest PG&E's claim of exemption, and the notice is final. If PG&E's facilities are not evaluated in another agency's environmental review or if the interconnecting line is over 200 kV, and no other exemptions are applicable, PG&E may need to seek approval from the CPUC (i.e., Certificate of Public Convenience and Necessity or Permit to Construct). Although the process may be expedited if an environmental review has already taken place, the process could take as long as 18 months or more if the CPUC needs to conduct its own environmental evaluation (i.e., Negative Declaration or Environmental Impact Report).

To avoid these delays, the project proponent is urged to include all PG&E facility work in its project description and application to the lead agency performing CEQA review on the project. The lead agency must consider the environmental impacts of the interconnection electric facility, whether to be built by the developer with the intent to transfer ownership to PG&E or to be built and owned by PG&E directly, and make a finding of no significant unavoidable environmental impacts from those facilities. If the interconnection facilities do not include a new line over 200 kV, PG&E would then file an Advice Letter with the CPUC and provide public notice on proposed construction of the facilities. (The noticing process takes about 90 days if no protests are filed, but should be done as early as possible so that a protest does not delay construction. PG&E has no control over the time it takes the CPUC to respond when issues arise.) . If a separate Permit to Construct is required by the CPUC, the timelines on the chart on Figure 4.1-1 "Estimated Construction Phasing for Caltrain Electrification Program Alternative" would need to be amended to reflect the additional time (~18 months prior to Electrical Equipment Interconnection) required by PG&E to go through this regulatory process.

Facilities built under this procedure must also be designed to include consideration of electric and magnetic field (EMF) mitigation measures pursuant to PG&E "EMF Design Guidelines of New Electrical Facilities: Transmission, Substation and Distribution."

Please see Section III in General Order 131-D. This document can be found in the CPUC's web page at: http://www.cpuc.ca.gov/published/Graphics/589.PDF.

In summary, it is in the best interests of the PCJB and PG&E to work collaboratively to ensure the successful implementation of the Caltrains Electrification Program through the adequate environmental review of any new 115 kV transmission lines in the DEIR/FEIR. We would welcome the opportunity to discuss our comments in greater detail with your project team. Please feel free to contact me at (415) 973-5817 or Mr. Rocco Colicchia at (415) 973-1064 if you have any questions or require additional information.

Sincerely,

Loren Loo
Senior Project Specialist
Pacific Gas and Electric Company

Cc:

Rocco Colicchia
Pacific Gas and Electric Company
123 Mission St, Room 1613
Mail Code H16B
San Francisco, CA 94105

Frank Tsai
Pacific Gas and Electric Company
245 Market St, Room 320
Mail Code N3B
San Francisco, CA 94105

Tom Marki
Pacific Gas and Electric Company
1 1919 Webster St, Room 154
Oakland, CA 94612

Palo Alto Medical Foundation

A Sutter Health Affiliate

Palo Alto Medical Clinic
795 El Camino Real
Palo Alto, CA 94301
(650) 321-4121

May 10, 2004

DVLRT MAY13'04 AM 8:21

Caltrain Electrification
1250 San Carlos Avenue
San Carlos, CA 94070

Ref: Caltrain Electrification Program, Environmental Assessment/Draft Environmental Impact Report

To Whom It May Concern:

The Palo Alto Medical Foundation is greatly concerned with the possibility of electromagnetic interference and its impact on various medical technologies, including Magnetic Resonance Imaging and Telemetry.

We expect the Environmental Impact Report to consider these potentially life threatening impacts carefully.

Sincerely,

Melissa Stai

Melissa Stai
Manager, Support Services

W. E. (Bill) WIMMER
Vice President-Engineering
Room 1030
(402) 271-4345

J. C. (Craig) DOMSKI
Chief Engineer-Track Programs
Room 1000
(402) 271-6153

T. T. (Tom) OGEE
Chief Engineer-Design
Room 1030
(402) 271-4946

D. L. (Darrel) DETERDING
Chief Engineer-Construction
Room 1030
(402) 271-3237

P.M. (Phil) ABARAY
Chief Engineer-Signals
Room 1000
(402) 271-3036

May 25, 2004

Mr. Erik Olafsson, Senior Planner
San Mateo County Transit District
1250 San Carlos Avenue
P.O. Box 3006
San Carlos, CA 94070-1306

SUBJECT: ***Comments on EA/DEIR for the CALTRAIN Electrification Program***

Dear Mr. Olafsson,

The Union Pacific Railroad appreciates the opportunity to comment on the proposed CALTRAIN Electrification Program. The proposed project has significant impact to the railroad and will require extensive coordination between the Peninsula Corridor Joint Powers Board and the Union Pacific Railroad.

In response to your request for comments, we submit the following:

1. The project must not impact or preclude the Union Pacific's responsibility to fulfill its common carrier obligations either by limiting our ability to serve existing and future customers or by limiting future expansion capabilities.

2. The report indicates the design of the electrical distribution system and overhead electrical supply system will follow the National Electric Safety Code. The design must also follow the guidance of the American Railway Engineering and Maintenance-of-Way Association (AREMA) 2002 Manual for Railway Engineering, Chapter 33, Electrical Energy Utilization.

3. Along trackage where the Union Pacific has operating rights as well as any operation proposed for Union Pacific track, adequate vertical clearance from top of rail and lateral clearance from centerline of track must be provided in accordance with AREMA standard clearances for overhead electrification as shown in the 2002 Manual for Railway Engineering, Chapter 28, Section 1.8, Figure 28-1-7.

4. The signal system and crossing warning systems shall be designed and installed to continue to support Union Pacific Railroad train operations.

5. Replacement of crossing warning equipment shall be approved by regulating state and local authorities, where required.

6. Replacement, modification, installation, operation and maintenance costs of signal and crossing system facilities required for UPRR train service operations shall be included in scope of project costs

7. Installation, operation and maintenance of signal and crossing system facilities shall be reviewed and approved by Union Pacific Railroad prior to implementation.

8. Proposed designs of the electrification system shall be submitted to the Union Pacific Railroad engineering department for review and approval prior to construction.

Yours truly,

Tom

Tom Ogee

CALTRAIN.doc

VIII INDIVIDUALS

Electrification

From: Jeff Abramowitz [jeffa@broadcom.com]
Sent: Tuesday, May 25, 2004 9:11 PM
To: Electrification
Subject: Opposition to electrification plan

I'm writing to voice my opposition to the electrification plan of caltrain. I don't believe adequate attention has been paid to the environmental issues - specifically destruction of the trees.

Jeff

Sent from my Broadcom enabled Treo

Electrification

From: Marcy Abramowitz [radab@pacbell.net]

Sent: Tuesday, May 25, 2004 11:52 PM

To: Electrification

Subject: POV Against Electrification

I am writing to express my opposition to Caltrain's electrification plan. I do not believe that adequate attention has been paid to the environmental issues or to the impact that electrification will have on adjacent neighborhoods. I also believe that electrification should be considered in concert with plans to build a bullet train to LA. Our rail system – and all those that would be impacted by Caltrain's decisions -- would benefit from a proper long-term view.

Marcy Abramowitz
360 Lennox Ave.
Menlo Park

Electrification

From: Alex Alexander [alexalex@wli.net]
Sent: Sunday, May 23, 2004 2:59 PM
To: Electrification
Subject: Preserve the trees

My name is Alex Alexander and I live in Atherton adjacent to the railroad tracks a few hundred yards north of the Atherton train station.

I want to urge you to preserve the trees, as much as possible, along the tracks as you upgrade the rail service over the upcoming months and years.

I believe in progress, but I also believe in preserving the irreplaceable trees along the railroad route.

I know that, with care and forethought, many if not all the mature trees along the route can be preserved. I hope you will make that effort. It is easy to merely say, "cut the trees" and let it go at that. But I also know that with some thought and planning, most if not all the trees can be preserved with no negative impact on the operation of the upgraded rail service. It may require some judicious trimming here and there, but that seems worth the effort.

Quality of life counts for as much as efficiency...doesn't it?

Alex Alexander
alexalex@wli.net
650-995-0050
73 Belleau Avenue
Atherton, CA 94027

RECEIVED
MAY 0 1 2004
MIG, BERKELEY

PENINSULA CORRIDOR JOINT POWERS BOARD (JPB)
THE AUTHORITY THAT OPERATES

Caltrain

WELCOMES YOU TO THE

CALTRAIN ELECTRIFICATION PROGRAM
DRAFT ENVIRONMENTAL DOCUMENT REVIEW
PUBLIC MEETING

Thursday, April 22, 2004 • 6:00 - 8:00 pm • San Francisco County
Saturday, April 24, 2004 • 10:00 am - 12:00 noon • Northern Santa Clara County
Wednesday, April 28, 2004 • 6:00 - 8:00 p.m. • Southern Santa Clara County
Saturday, May 1, 2004 • 10:00 am - 12:00 noon • San Mateo County

COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

I like the new Jersey way of do it,

94061 R, G

Name: Lloyd Andrus Address: 1458 Hudson Phone: —

Please hand in your comment card at the end of the meeting or mail it to:
Erik Ólafsson, Senior Planner *San Mateo County Transit District* *1250 San Carlos Avenue*
P.O. Box 3006 *San Carlos, CA 94070-1306* *Mail by May 25, 2004*

RECEIVED
MAY 0 1 2004
MIG, BERKELEY

PENINSULA CORRIDOR JOINT POWERS BOARD (JPB)
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COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

Please go ahead with electrification. Its proven in Japan and Europe. It will work here!!

Name: DAVID BILLECI Address: 484 MOCIMO DR SF 94127 Phone: (415) 586-2515

Please hand in your comment card at the end of the meeting or mail it to:
Erik Olafsson, Senior Planner *San Mateo County Transit District* *1250 San Carlos Avenue*
P.O. Box 3006 *San Carlos, CA 94070-1306* *Mail by May 25, 2004*

May 17, 2004

DOT MAY21'04 PM 1:58

Marie Pang,

Thanks for returning my call last week. With your help, I found the Caltrain Electrification Program Draft EIR reference on costs and funding.

There is no mention of high-speed rail as a funding source, and, to my surprise, I didn't find a mention of HSR anywhere in the report.

The draft HSR report just published assumes that the HSR program will fund "1/2 the cost of electrifying the Caltrain corridor" (copy enclosed), and so I supposed HSR would be included as the principal funding source. Hence, my question to you as to whether or not the Caltrain electrification program is contingent on the availability of HSR funds.

I also supposed that the capital costs shown for Caltrain electrification, signaling, etc., would enable future shared use with HSR without further costs, although the report doesn't say so. Is that true?

The Caltrain electrification program stops at the 4th & King site in San Francisco. I assume that costs for electrifying the additional 1.3 miles to the TBT are included in the Caltrain DTX program.

For your information, I met with Darrel Maxey in San Carlos a year ago and reviewed with him what I thought was an interesting architectural concept for the future development of the 4th & King yards. Enclosed is a copy of my remarks at the SFRA certification meeting May 20th (which I think you heard). The supporting material includes several of the drawings that I presented to Darrel.

I appreciate your quick response and interest.

William Blackwell

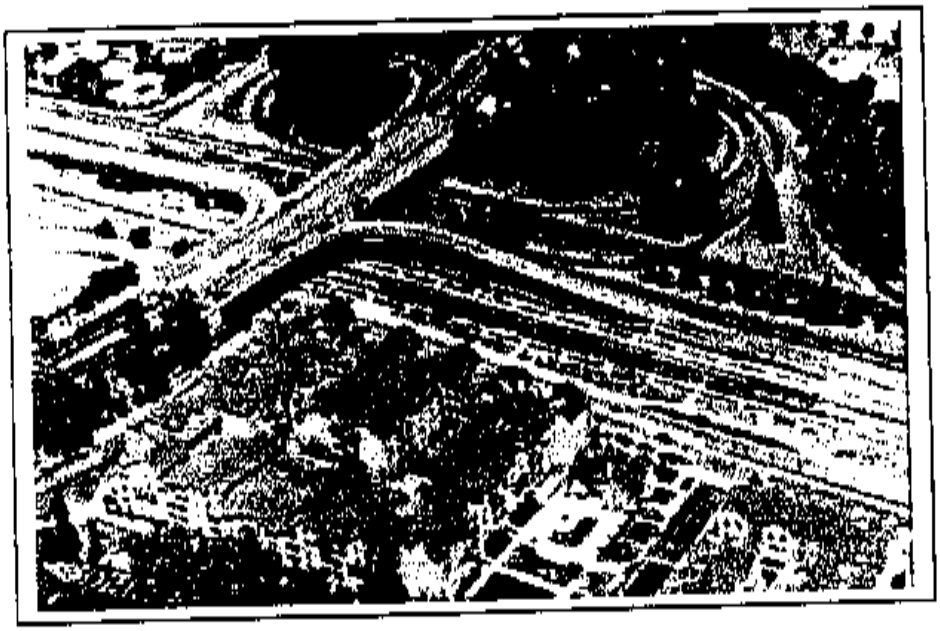
(510) 654-4456

Estimated capital costs of the Caltrain and U.S. 101 exclusive guideway alignments are similar, with between $200 to $400 million more for the U.S. 101 alignments. Both exclusive guideway alignments would involve extensive use of aerial structures, with some tunnel segments. It is estimated that there will be more right-of-way (ROW) and cost required for the U.S. 101 corridor than for Caltrain, given that there is little space available for expansion adjacent to the Freeway. In addition, the freeway has substandard features (e.g., medians and shoulders) in many places, and it is assumed that any room that might be available for high-speed train facilities likely would be used by Caltrans to upgrade the freeway in these areas. By contrast, there appears to be space available adjacent to the Caltrain ROW to construct an aerial structure partially overhanging the tracks and partially over adjacent streets where they are present.

Estimated capital costs for the Caltrain—Shared Use options are substantially lower – approximately $1 billion less for the Basic Service Option and $400 less million for the Four-track Station Option. This assumes that the high-speed train program would pay for generally ½ the costs for electrifying the Caltrain corridor and ½ the costs for an extension of Caltrain to the Transbay Terminal.

For the Basic Service Option, additional significant costs would be for grade separation of 47 of the existing grade crossings and the construction of pedestrian overpasses at the Caltrain stations. For the Four-track Station Option, there would be additional costs for aerial structures and a tunnel, but these costs are somewhat offset by the reduced number of Caltrain grade separations that would need to be constructed for high-speed trains.

A major portion of the Caltrain corridor passes through industrial areas, but there are critical locations where it passes through principally residential land uses. The corridor also passes through suburban town centers, oftentimes with development immediately adjacent to the rail line (e.g., San Mateo, Redwood City).



The U.S. 101 corridor is generally more commercial, but it also has numerous segments of residential uses near or immediately adjacent to the freeway, typically behind a freeway noise wall.

The aerial portions of the separate use alignments on both the Caltrain and U.S. 101 corridors would introduce a major new visual element along the U.S. 101 and Caltrain corridor. Such facilities could have critical visual impacts (intrusion/shade/shadow) on the residential portions

Electrification

From: Elizabeth Blois [eblois@earthlink.net]

Sent: Tuesday, May 25, 2004 10:49 PM

To: Electrification

Cc: eblois@earthlink.net

Subject: 2 Comments on Electrification of the Peninsula Caltrain line--comments due today May 25, 2004

We are long-time residents of Menlo Park, California. I am writing to voice strong opposition against the proposed electrification project and the related EIR for the Peninsula Caltrain line from Gilroy to San Francisco. The EIR does not adequately address the environmental impact that the proposed modifications will have to residential neighborhoods along the line. Much of this line will pass through residential neighborhoods, not commercial developments. We are concerned with many aspects of the proposals, including:

1. The proposed design of the grade separations is seriously flawed and will lead to a 10-foot burm, with additional height to accomodate electrical wires. This will lead to serious degradation of the surrounding environment and a huge decrease in property values. For example, in Atherton, we understand that 80 or more trees might be cut down and many more pruned seriously. Apparently the ERI does not adequately disclose the extent of tree removal that will be required. The impact in Menlo Park is not adequately adressed. We understand that the EIR took a stretch of Menlo that has little immediate residentail development directly next to the tracks and then projected this to the community. We live in the neighborhood of Felton Gables, a community with many single-family homes directly line the tracks. Would your directors like to be the owner of one of these homes, looking out your dining room to a 10 foot pile of dirt (decorated with a few flowers!)?

2. We do not live directly next to the tracks, but about 3 blocks away. The impact of the noise polution on our home is not adequately assessed in the EIR. We believe we will have significantly more noise if the proposed changes are made.

3. The elevated track will seriously separate the community. One has to only go to San Carlos to see this impact on a live case study. The neighborhood to the east of the tracks has deteriorated since its completion and is now much more separated from the communities to the west of the tracks. We did this with highway 101. Why would we repeat this flawed design again?

4. Train ridership has not increased significantly and this expansion is overkill.

5. If electrification is really to come, CalTrain needs to **listen** to the communities that will be impacted by the construction and the ultimate modifications. The designs being put forth (or shall we say railroaded) through are flawed and unnecessary. **Alternate plans that have less negative consequences to the environment of the Peninsula should be carefully sturdied and evalutaed. For example, CalTrain should consider no raised tracks and the innovatiove designs put forth by Nick Watry.**

6. Even if the Peninsula corridor electrification service is completed, the Peninsula is not a suitable location for an expansion to a bullet train to Southern California. It would have too much of a negative impact on the residential neighborhoods of the Peninsula. If another location cannot be located, then transfer in the Gilroy station should be proposed. I will work hard to defeat any bond measure proposed to build this rail line on the Peninsula. I will also actively oppose any work plans that call for construction and then pull-down and repeat work.

Elizabeth and Marsden Blois
100 Felton Drive
Menlo Park, CA 94025

PS--The CalTrain Web location www.CalTrain.com has not been available for much of this evening so I was not able to pull up and refer to the EIR. Was this outage coincidence or by design?

Elizabeth Blois
eblois@earthlink.net
Why Wait? Move to EarthLink.

Electrification

From: barry@rockusa.com
Sent: Monday, May 10, 2004 1:29 AM
To: Electrification
Subject: Great Idea!!!

The one thing that I've always hated about taking Caltrains is the horrible diesel fuel smell that permeates the cars. Electrifying the trains means that not only will passengers be much more comfortable, but the entire system will greatly reduce pollution. I'm all for it!

- Barry Nelson Brams
  5/10/04

Electrification

From: Adrian Brandt [adrian.brandt@rcn.com]
Sent: Friday, May 21, 2004 11:31 AM
To: Electrification
Subject: EIR must quantify diesel fume exposure to passengers & crew

Dear Sirs:

The EIR must examine and quantify the diesel fumes and particulates that Caltrain passengers riding inside the train are exposed to both with and without electrification.

Significant (and highly variable) levels of diesel exhaust currently pollute interior air of passenger cars on trains passing through the 4 tunnels in San Francisco. It is by far the worst in tunnels 1 and 2 on southbound trains. The locomotive is on the front of the train on such trains, and is essentially filling the tunnel with thick exhaust as it is moving relatively slowly and accelerating, while pulling the passenger cars through a smoke-filled tube.

The level of diesel exhaust intrusion varies greatly depending on how smoky the tunnel is, which depends on how smoky the particular locomotive on the train is, and how much residual smoke is lingering in the tunnel from prior trains and trains passing in the opposite direction. The severity of the car interior diesel pollution the passengers (and train crew) are exposed to appears to vary widely from car to car and locomotive to locomotive.

The HVAC systems on the cars seem to vary in the rate at which they allow outside air (and therefore diesel exhaust) to mix with interior air. The cars may also have significant differences in how air-tight their door-seals are, accounting for variations in outside air/smoke intrusion.

The EIR should contain a section which details the best/worst/average level of diesel exhaust exposure to passengers and crew (also in the locomotive cabs) in the current equipment (no project) versus with electrification. The health effects/differences on a range of rider types (ranging from occasional customer to long-time regulars to crew members) should be addressed and assessed based on measured vs. expected exposure to pollutants aboard the train in both a no project vs. electrification scenario.

There could be significant worker's comp and/or litigation costs associated with crews and/or passengers claiming their respiratory health was hurt by exposure to diesel fumes riding or working aboard Caltrain. If the injured party does not recognize or blame Caltrain diesel exhaust, these costs could also be hidden or external costs related sick leave, worker's comp or other insurance claims.

Best regards,
Adrian Brandt
257 Grand St.
Redwood City, CA 94062

Electrification

From: Paul Casey [Paul-Casey@ci.santa-monica.ca.us]
Sent: Thursday, April 29, 2004 5:50 PM
To: Electrification
Subject: Project

Please extend to Los Angeles.

Electrification

From: Charlie Cho [cho@cheaux.com]
Sent: Monday, May 17, 2004 11:11 PM
To: Electrification
Subject: EIR comments

I strongly support the electrification of Caltrain. It is an idea whose time has come, especially in the face of rising fuel costs. I would like to offer the following comments:

1. Operate the Gilroy extension separately from the SF-SJ main line. Electrify only between San Francisco and San Jose. Santa Clara VTA will inevitably resist and drag their feet on paying its fair share for electrification. Not electrifying to Gilroy will reduce the amount VTA will have to cough up. In addition to lowering costs, this will significantly reduce the amount of coordination required with the Union Pacific Railroad. For the forseeable future, the Gilroy extension will not see levels of service anywhere near enough to justify the capital and operating costs of electrification. Separating it to a different line can have other advantages. Instead of simply ending at San Jose, Gilroy trains could be extended to Union City, for example, providing an interim connection to BART.

2. Buy out Union Pacific's trackage rights to the SF-SJ main line. By removing freight from the line, Caltrain can free itself from Federal Railroad Administration regulations on passenger car impact standards. These standards do little to enhance passenger safety while driving up weight and costs. FRA regulations, as noted in the EIR, severely limit Caltrain's choices in both EMUs and electric locomotives. Freed of these onerous regulations, Caltrain will be able to avail itself to many competitively priced, off-the-shelf, and well-proven EMU cars that will knock the socks off of the riding public. The savings in rolling stock acquisition alone could pay for the trackage rights. Lower track maintenance costs will
continue forever. Operating the Gilroy extension separately, as noted above, using standard FRA-compliant equipment, would be a prerequisite.

3. When considering rolling stock, consider the possibility of one-person train operation (OPTO). OPTO can allow more frequent service for the same labor cost, especially off-peak. Short trains every thirty minutes instead of long trains every hour at night and weekends will go a long way towards making Caltrain a true rapid transit system, not just a commuter railroad, maximizing the public's return on the electrification investment.

I hope electrification will be an opportunity seized by Caltrain to greatly modernize and streamline its operations, enabling it to provide rapid transit-like levels of service and offer a legitimate alternative to the automobile.

Charlie Cho
San Jose

Electrification

From: Misc [misc@daogaw.net]
Sent: Tuesday, May 04, 2004 7:00 PM
To: Electrification
Subject: Comments on Caltrain's Electrification Program (Draft EDR)

Hello There,

I was at the Saturday, May 2nd, Public Hearing on Caltrain's Electrification Program. Thank you for having this meeting.

I am mixed on my support of this program. There were a number of items missing in the EDR that I would like to see before making my decision. They are as follows:

- credit to the electrification program for avoiding replacing the current diesel locomotives and cars. At some point the current equipment will need to be replaced. If they are replaced with electric equipment and electrification happens at the same time, this should be an overall savings to Caltrain.
- as someone said on Saturday, the health impacts (e.g., hospitalization costs, etc.) of indirect impacts to the environment should be included. The example cited in the meeting was the diesel fumes and asthma. I am sure there are others. Electrical generation would also have impacts. My expectation is that electrification would benefit from including these costs against diesel usage.
- as someone said on Saturday, the whole thrust of this EDR and program is assuming that electrification is what needs to happen. I would like to see a cost/benefit analysis of spending the same amount of money (or less) on improvements to the current operations (e.g., adding more trains, using shorter trains perhaps at times, etc.). I believe there are some viable options in spending the funds on improvements on the current system that maybe a better use of the funds.
- include in the diesel analysis around pollution the fact that diesel locomotives are constantly being improved relative to emissions. I have read and seen references to the next generation of locomotives must meet tougher emissions standards. So, over time the diesel emissions should be going down though service additions may keep the net change at zero.
- include the option of waiting for when hi-speed rail comes through to build out the line to 4 tracks and electrify it at the same time. I believe that significant sums of funds will be wasted by electrifying the line in its current configuration to only have hi-speed rail come through within 10 years later and need to redo much of the work. There should be some analysis around when to do the electrification.
- there should be the option of dual mode (diesel/electric) units being used for the transbay/downtown extension. While I understand dual mode units are not desirable for a number of reasons, to electrify the entire line just to be able to extend the line into downtown seems a bit much. I would like to see the financial justification for that decision.
- there were comments on Saturday around the several recent EDRs and/or Strategic Plans not all being in-sync with the figures and assumptions. This needs to be corrected.
- there should be analysis around spending the funds to grade separate the current line and timing/safety improvements that would be achieved. This could allow some trains to run faster perhaps which helps the timing while reducing the number of accidents/deaths that occur.
- as far as the OCS vs. 3rd rail which was brought up on Saturday, I support OCS. I have been to a number of countries in Europe and Asia that use OCS in urban settings. I find it hard to believe they would be using OCS instead of 3rd rail unless there were some good reasons for it.
- as far as OCS being unsightly, yes, some effort needs to be done to keep the "sight lines as clean as possible", but this strikes me as a bit NIMBY thinking when neighbors say they don't want it used. Perhaps some analysis around the cost difference of 3rd rail vs. OCS would help so folks understand that their taxes would need to go up to pay for this option.

In conclusion, I certainly can be convinced the electrification is the way to go, but there needs to be more cost/benefit analysis done to truly determine this is the best use of the funds. Basically, I would add the approach that if Caltrain had the $500M to $800M

of funds to either electrify the line or do anything it else, electrification is still the best use of the funds.

Thank you,
Andrew Cigolle
San Carlos resident
Caltrain rider

Electrification

From: Todd Clobes [clobes.todd@gene.com]
Sent: Tuesday, May 25, 2004 2:45 PM
To: Electrification
Subject: CalTrain Electrification

tclobes.vcf (392 B)

Dear CalTrain,

I have read the eletrification plan for CalTrain and completely agree that this project is worthy, cost effective, and should move forward as soon as possible. Please do not bow to the small but vocal opponents (specifically those in Atherton) who do not see the merits of increase service, quieter trains, and less pollution. A few wires and losing some trees along the CalTrain right of way is a small price to pay for the many benefits of this project.

Regards,
Todd Clobes
San Francisco

E4H
2

PENINSULA CORRIDOR JOINT POWERS BOARD (JPB)
THE AUTHORITY THAT OPERATES

Caltrain

WELCOMES YOU TO THE

CALTRAIN ELECTRIFICATION PROGRAM
DRAFT ENVIRONMENTAL DOCUMENT REVIEW
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RECEIVED
MAY 01 2004
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COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

Chapter 3: Env' settings & Consequences, pg 3-29

3.3.2.3: Impacts
Corridorwide Air Pollutant Emissions

states that NOx emissions do not decrease with electrification,

Please clarify

Name: IRVIN DAWID
753 Alma St. # 126
Palo Alto, CA 94301

s:_____ Phone: 650 853-0558

Please hand in your comment card at the end of the meeting or mail it to:

Erik Ólafsson, Senior Planner — *San Mateo County Transit District* — *1250 San Carlos Avenue*
P.O. Box 3006 — *San Carlos, CA 94070-1306* — *Mail by May 25, 2004*

Electrification

From: Lindell, Astrid
Sent: Tuesday, May 04, 2004 12:14 PM
To: Electrification
Subject: FW: Caltrain.com Feedback: Other

-----Original Message-----
From: M%2E+Jason+Dewees [mailto:jjuania@yahoo.com]
Sent: Tuesday, May 04, 2004 10:48 AM
To: Web Comments (Caltrain)
Subject: Caltrain.com Feedback: Other

This message has been generated as Feedback on Caltrain.com

ELECTRIFICATION
I am very much in favor of Caltrain electrification from Gilroy (or wherever the southern terminus will be) and San Francisco Transbay or 4th Street. The monomaniacal obsession of San Jose's mayor with BART should not get in the way of enhancing travel for other Santa Clara County residents and the rest of the Peninsula. The addition of overhead wires will be more than compensated by the loss of diesel exhaust and noise and the enhancement of speed and service into the Transbay Terminal subway. Jason Dewees, San Francisco

M. Jason Dewees

Electrification

From: Olafsson, Erik

Sent: Thursday, May 20, 2004 12:39 PM

To: Electrification

Subject: Call from Connell Dunning EPA

I got a call from Connell Dunning at federal EPA in SF (415) 947-4161. She wanted to know about access roads to the project. I think she was referring to access roads for the primary power stations, though I said that she should mention that in her comment letter. She also wanted to know why we weren't proposing a third rail. I told her it because we don't have a grade-separated, fenced right-of-way. She wanted to know why we dismissed clean-diesel or hybrid locomotives, and I told her to write her comments to us. She was also interested in the compatibility of High Speed Rail to our proposed technology.

Erik Olafsson, Senior Planner
Strategic and Long Range Planning
San Mateo County Transit District
1250 San Carlos Avenue
San Carlos, CA 94070-1306
(650) 508-6358
(650) 508-7938 FAX
olafssone@samtrans.com

Electrification

From: Martin Engel [martinengel@earthlink.net]
Sent: Tuesday, May 25, 2004 10:59 PM
To: Electrification
Cc: Judith.Orasanu@nasa.gov
Subject: Don't electrify

>Gentlemen:
>
>I oppose the plan to electrify the Caltrain commuter system. Here's
>why:
>
>1. Upgrading an obsolete, 19th century technology in the 21st century
>makes no sense. 2. Upgrading an underutilized commuter system will not
>increase ridership. 3. Heavy rail for short haul commutation is like
>killing flies with sledgehammers.
>4. California is in fiscal crisis. Electrification is high cost, high
>waste pork-barrel politics.
>5. Power generated for electrification transfers the pollution from
>locomotives to power substations.
>6. The overheads for electrification are profoundly destructive of the
>aesthetic environment. They pollute visually.
>7. There will be no horn or other noise abatement.
>8. CALTRAIN and the JPB love to spend OPM (other people's money), build
>headcount and increase budgets. This is one way to do that.
>9. Trees will be cut down in vast number. Electrification will
>(contribute) convert the Peninsula into a concrete, industrial wasteland.
>10. The railroad bureaucracy is bent on converting the entire Peninsula to
>a railroad right-of-way. Electrification is one step on that path.
>
>

****
Martin Engel
1621 Stone Pine Lane
Menlo Park, California 94025
650: 323-1670
martinengel@earthlink.net
****

Electrification

From: Hamid Farzi [HRFARZI@msn.com]
Sent: Thursday, May 20, 2004 9:00 AM
To: Electrification
Subject: comments

May 20th, 2004

To Whom it Man Concern:

What a shame it is to consider destroying the landscape of established communities in the name of "progress".
You would think that there would be a better solution to providing the upgrades we need in our public transportation system. Shame on all of us for not having thought this through 50 years ago! Who would have known....

It's interesting- almost everyone I know is actively in support of developing public transportation for others. Isn't it strange these are the same people who never use, and likely never will use this form of transportation themselves.

I suspect that the overall figures for the ridership of the Caltrain system is grossly overestimated, whereas the budget of these projects are obviously grossly underestimated. We best do a double check of these studies before we spend all that hard earned money. *This comment applies specifically to the suggestion of a "Dumbarton Rail Connection".*

Lets make sure the facts are accurate, the public is properly informed of the costs and the devastating impact on all communities, not just Atherton.

Sincerely,

A concerned citizen

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PENINSULA CORRIDOR JOINT POWERS BOARD (JPB)
THE AUTHORITY THAT OPERATES

Caltrain

WELCOMES YOU TO THE

CALTRAIN ELECTRIFICATION PROGRAM
DRAFT ENVIRONMENTAL DOCUMENT REVIEW
PUBLIC MEETING

Thursday, April 22, 2004 • 6:00 - 8:00 pm • San Francisco County
Saturday, April 24, 2004 • 10:00 am - 12:00 noon • Northern Santa Clara County
Wednesday, April 28, 2004 • 6:00 - 8:00 p.m. • Southern Santa Clara County
Saturday, May 1, 2004 • 10:00 am - 12:00 noon • San Mateo County

COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

1. This project should begin ~~ASAP~~ after all questions have been raised!

T (2) A link over the Dumbarton R.R. bridge should be included in Phase II

C (3) Any suggestion of extending BART down the west side - from Millbrae to San Jose should be permanently discarded!

R (4) More cities should be included for the express trains. No stops between Palo Alto and Hillsdale? Doesn't make any sense!

(5) Must have train/station level entry level.

Name: BOB FIGONE Address: 260 FAIRMONT AVE SAN CARLOS 94070 Phone: 650-591-3667

rfigone@att.net

Please hand in your comment card at the end of the meeting or mail it to:
Erik Olafsson, Senior Planner — *P.O. Box 3006*
San Mateo County Transit District — *San Carlos, CA 94070-1306*
1250 San Carlos Avenue — *Mail by May 25, 2004*

Electrification

From: Frazy@aol.com
Sent: Tuesday, May 25, 2004 9:56 PM
To: Electrification
Subject: Electrification at Encinal Avenue

Dear Caltrain,

I am writing to you with my comments regarding the electrification. I am a long time resident of Menlo Park very near the Encinal Avenue crossing.

I object to the electrification.
I object to the raising of the tracks.
I object to the loss of heritage trees along the right of way.
I object to the overhead electrical wires.

Sincerely,

Patti Frazier
325 Lennox Avenue
Menlo Park, CA 94025

Electrification

From: Lindell, Astrid
Sent: Tuesday, April 27, 2004 8:46 AM
To: Electrification

From Terry Gammon, 3837 La Selva Dr # B, Palo Alto 94306:

CALTRAIN ELECTRIFICATION is a good idea, but the tracks need to be elevated to separate the whole system from cars.

Electrification

From: Joseph Grass [joegrass@comcast.net]
Sent: Tuesday, May 25, 2004 10:36 PM
To: Electrification
Subject: Comments on EIR for Caltrain Electrification

As Menlo Park residents living near the Caltrain tracks, my spouse and I are concerned about the plans for electrification of Caltrain, and the associated grade separation required. My concerns are as follows:

1. Too many trees, including heritage trees will be uprooted in the process, including more trees that will be agressively pruned. This will not only have a negative visual impact, but also will allow more train noise to emanate from the track area into the surrounding residential neighborhoods.

2. Not enough study has been done to identify exactly how many trees will be impacted, especially in the Menlo Park part of the corridor.

3. The elevation of the train tracks onto a berm going through Atherton, Menlo Park, Palo Alto, and the rest of the Peninsula will be extremely unsightly. The associated electrical wires will also add to the negative impact, being even higher than the train. This kind of elevated train track is suited to an industrial area, but definitley not to the residential neighborhoods of Menlo Park, Atherton, and Palo Alto.

4. An elevated train track will project a great deal more noise into the surrounding residential neighborhoods, compared to the alternative of leaving the train track at grade level with streets going below grade level at crossings.

5. Not enough consideration has been given to the alternative of keeping the train tracks at grade level, and making all streets go below grade level at the crossings. Citizens in the community with relevant engineering backgrounds have proposed alternate ideas to accomplish this, however they have been dismissed out of hand or ignored without due consideration of their ideas.

6. The electrification is proposed to be done prior to the grade separation, which would require the electrification work to be redone again after grade separation. This seems to be a waste of taxpayer dollars.

I respectfully request that the above issues be more thoroughly investigated before this process proceeds. Alternative ideas from the community must be officially considered and addressed in writing in the EIR, and the full environmental impact must be quantified before this project may proceed. A full cost benefit analysis of all options for grade separation should be done as well. To do less would be a disservice to the community that Caltrain is meant to serve.

Thank you,

Joseph Grass
357 Lennox Avenue
Menlo Park, CA 94025

Electrification

From: John Griffin [ljgriff1@comcast.net]
Sent: Tuesday, May 18, 2004 3:50 PM
To: Electrification
Subject: Trees in Atherton

Dear Caltrain,

From what I've been reading electrification of the train tracks through my neighborhood will have a significant negative visual impact (noise ?). It would be helpful to see exactly what the electrical towers and lines will look like and what trees would be cut down. What kind of screening is Caltrain prepared to put in place? How will these neighborhoods be compensated? It is unfair to expect a few to bear the burden (and loss of property value) of what is deemed to be a public good. I'm against electrification until I have enough information to determine whether or not I would favor it. A full impact article with pictures should be published in all the local papers before you close acceptance of public comments.

Also, it is ridiculous to put high speed rail through residential neighborhoods. The Altamont Pass route is a better idea.

Sincerely,

Linda Griffin
50 Walnut Ave.
Atherton

Electrification

From: Michael Griffin [jazzbuff@sbcglobal.net]
Sent: Monday, May 03, 2004 11:58 PM
To: Electrification
Subject: I vote YES on electrification...

Sir/Madam -- I wish to register a strong YES for Caltrain electrification. It's clean, yields a faster schedule, reduces noise and air pollution, makes the transition possible to SF Trans-Bay terminal sooner.

I serve on the Palo Alto Planning & Transportation Commission. We heard a presentation 2 mo's ago by Caltrain that appeared to under-play electrification. Why, I know not. But my commission was basically supportive. And I personally am VERY supportive, despite the high cost and less-than-attractive-wires. Pls. add my vote to your list of supporters. Michael Griffin, Chair--Palo Alto PTC

V

PENINSULA CORRIDOR JOINT POWERS BOARD (JPB)
THE AUTHORITY THAT OPERATES

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WELCOMES YOU TO THE

CALTRAIN ELECTRIFICATION PROGRAM
DRAFT ENVIRONMENTAL DOCUMENT REVIEW
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MAY 01 2004
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COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

Burlingame Avenue station is the only registered historic building in Burlingame. It forms a visual anchor for the Burlingame Avenue area.

We [redacted]

Name: STEPHEN HAMILTON Address: 105 CRESCENT AVE BURLINGAME, CA Phone 347-2436

Please hand in your comment card at the end of the meeting or mail it to:

Erik Olafsson, Senior Planner | *San Mateo County Transit District* | *1250 San Carlos Avenue*
P.O. Box 3006 | *San Carlos, CA 94070-1306* | *Mail by May 25, 2004*

Electrification

From: Kaaren Hanson [kaarenhanson@comcast.net]
Sent: Tuesday, May 25, 2004 10:37 PM
To: Electrification
Subject: Comments on EIR for Caltrain Electrification

As Menlo Park residents living near the Caltrain tracks, my spouse and I are concerned about the plans for electrification of Caltrain, and the associated grade separation required. My concerns are as follows:

1. Too many trees, including heritage trees will be uprooted in the process, including more trees that will be agressively pruned. This will not only have a negative visual impact, but also will allow more train noise to emanate from the track area into the surrounding residential neighborhoods.

2. Not enough study has been done to identify exactly how many trees will be impacted, especially in the Menlo Park part of the corridor.

3. The elevation of the train tracks onto a berm going through Atherton, Menlo Park, Palo Alto, and the rest of the Peninsula will be extremely unsightly. The associated electrical wires will also add to the negative impact, being even higher than the train. This kind of elevated train track is suited to an industrial area, but definitley not to the residential neighborhoods of Menlo Park, Atherton, and Palo Alto.

4. An elevated train track will project a great deal more noise into the surrounding residential neighborhoods, compared to the alternative of leaving the train track at grade level with streets going below grade level at crossings.

5. Not enough consideration has been given to the alternative of keeping the train tracks at grade level, and making all streets go below grade level at the crossings. Citizens in the community with relevant engineering backgrounds have proposed alternate ideas to accomplish this, however they have been dismissed out of hand or ignored without due consideration of their ideas.

6. The electrification is proposed to be done prior to the grade separation, which would require the electrification work to be redone again after grade separation. This seems to be a waste of taxpayer dollars.

I respectfully request that the above issues be more thoroughly investigated before this process proceeds. Alternative ideas from the community must be officially considered and addressed in writing in the EIR, and the full environmental impact must be quantified before this project may proceed. A full cost benefit analysis of all options for grade separation should be done as well. To do less would be a disservice to the community that Caltrain is meant to serve.

Thank you,

Kaaren Hanson
357 Lennox Avenue
Menlo Park, CA 94025

Electrification

From: Lambertus Hesselink [bert@kaos.stanford.edu]
Sent: Saturday, May 01, 2004 3:35 PM
To: Electrification
Cc: bert@kaos.stanford.edu
Subject: Electrification long overdue

Electrification of Caltrain is long overdue and should be implemented as soon as is practical. Please let me know if you need any further support for this project.

Sincerely,

Professor L. Hesselink
Stanford University

Electrification

From: Philip Hutcherson [philiphutcherson@yahoo.com]
Sent: Wednesday, April 21, 2004 5:19 PM
To: Electrification
Subject: Electricification good idea

Electrification makes good sense from a local sound and diesel pollution standpoint.

An idea: Add solar panels along the Caltrain right of way to offset the added electrical requirements of electric trains. Yes very expensive but payback might be in 10 years or so especially if fuel prices continue to rise. It also makes a strong efficiency and environmental statement.

Electrification

From: Hutchings, Stan [stan.hutchings@lmco.com]
Sent: Wednesday, April 21, 2004 3:35 PM
To: Electrification
Cc: Palo Alto City Council (E-mail)
Subject: suggestion for improvement

I also ask the Palo Alto City Council to forward, or include these comments in the Council's letter to the Valley Transportation Authority (VTA) to join other North County cities in asking the VTA Board and staff to re-examine the transit and Measure A priorities for the next 25 years.

The times Caltrain would be most useful to me is when I'm going to depart to or return from either San Francisco or San Jose airports. I would like to take a scheduled Caltrain and not have to worry about traffic, arranging a ride with a friend, hiring a taxi or shuttle, or parking if I drove myself. There are two major problems, however.
First, the baggage transfer.
Second, the schedule frequency.

You probably don't have to read the following explanation, you know exactly what I mean.

The train is extremely inconvenient for carrying luggage. The high steps to get on the train, the lack of convenient storage space, and the difficulty of disembarking with luggage are all severe problems. Once at the train/airport connection, it's easy and free to get to the airport even with luggage, a great attraction considering the cost of gas and airport parking. Getting to the connection with luggage is the big problem. Since I'd like to go to the airport, usually for an extended trip, I need luggage: suitcase, carryon, handbag/backpack. You need to come up with an efficient, attractive solution. One possibility would be a luggage service to collect and deliver luggage (perhaps in coordination with the airlines); security problems would have to be addressed. One possibility would be a special "airport connection" car, with easy access and storage, which stops as close as possible to the airport connection (perhaps taxi companies could be induced to have a cab or two at the station at scheduled arrival times, too). There are probably other solutions. The point is, my wife and I (and probably thousands of other travelers around the Bay Area) cannot use the train to go to and from the airports without better luggage handling.

The airlines require you to be at the airport 2-3 hours in advance. This can cause some time wasted getting to the airport too early, or stress if a later train is taken. Trains at a 20-minute interval would be most convenient; trains at a 60-minute or more interval is just too much. The return trip home is of even more concern, since just missing a train could involve a very long wait in the cold. Personally, I'd much prefer more frequent trains to faster trains (i.e., baby bullets).

Your consideration of these points would be appreciated.

Stan Hutchings
285 Rinconada Ave
Palo Alto, CA 94301

Electrification

From: Wolf, Carol

Sent: Friday, April 30, 2004 10:37 AM

To: Electrification

Cc: 'Mike Lewis'

Subject: Comment from City of Mountain View

I spoke with Joan Jenkins, Transportation and Policy Manager of City of Mountain View, at the Sunnyvale public meeting. She informed me that low income housing will be built within the next year at the proposed site for paralleling station PS-5.

Carol Wolf
Senior Engineer / Project Manager
PCJPB
650-508-7787
650-992-9810 (cell)
650-508-7967 (fax)

Electrification

From: Doug Kaufman [dougk_commish@yahoo.com]
Sent: Tuesday, May 25, 2004 11:41 PM
To: Electrification
Cc: Doug Kaufman; Doug at Work
Subject: Objection to Current Plans

I wish to object to several parts of the EIR for Caltrain's proposed electrification plans. Eighty Heritage trees in Atherton and 20+ ?? in Menlo Park are slated to be removed. The exact number and when depends on which Caltrain plan is being implemented. An equal or greater number of trees will be "pruned" aggressively. I strongly object to any number of tree being removed or "pruned".

I also understand that the electrification is being done PRIOR to the proposed Caltrain Grade Separation. This means if the current Grade Separation Plan is implemented you will tear out this round of electrification and install a new system. This is a reckless and wasteful use of public funds.

Doug Kaufman

357 Arden Road
Menlo Park, CA 94025

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WELCOMES YOU TO THE

CALTRAIN ELECTRIFICATION PROGRAM
DRAFT ENVIRONMENTAL DOCUMENT REVIEW
PUBLIC MEETING

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COMMENT CARD

Please give us your comments on the Caltrain Electrification Program.

[illegible] This also
to [illegible] locals to discuss their
reaction to electric trains over the years.
Emphasize that Caltrain electrification C
[illegible] PART C
[illegible]
420 or 2 ridership estimated gain vastly
underestimates. The pendulum swing to transit
per increasing toll & rail fuel costs. (650)

Name: Jim Kelly Address: 478 Oak Ave Phone: 583-2819
Palo Alto 94306

Please hand in your comment card at the end of the meeting or mail it to:
Erik Olafsson, Senior Planner *San Mateo County Transit District* *1250 San Carlos Avenue*
P.O. Box 3006 *San Carlos, CA 94070-1306* *Mail by May 25, 2004*

Electrification

From: Nick Kibre [nkibre@tellme.com]
Sent: Thursday, May 13, 2004 3:38 PM
To: Electrification
Subject: wires & aesthetics

some people have complained that overhead wires will spoil their views, but I wanted to let you know that some of us think catenary is beautiful!

and I would think that those who don't share this point of view would still be happy to trade some visual clutter for a huge reduction in noise.

Nick Kibre - nkibre@tellme.com - kf6lxh

Electrification

From: Nick Kibre [nkibre@tellme.com]
Sent: Thursday, May 13, 2004 3:43 PM
To: Electrification
Subject: multiple unit cars vs electric locomotives

it seems that trains of multiple unit cars provide a lot more flexibility than trains of non-powered cars powered by electric locomotives.

this flexibility would put caltrain in a much better position to offer improved service in the future esp if funding increases:

- shorter trains but more frequent
- maintaining frequent service during off hours and weekends, adapting to lower passenger load with shorter trains instead of fewer trains.

basically two sides of the same coin

Nick Kibre - nkibre@tellme.com - kf6lxh

Electrification

From: Hank Lawrence [lawrench@ix.netcom.com]
Sent: Monday, April 12, 2004 4:08 AM
To: Electrification
Subject: RE: Extended service to Gilroy.

From: Hank Lawrence [mailto:lawrench@ix.netcom.com]
Sent: Sunday, April 11, 2004 8:53 AM
To: 'electrification@caltrain.com'
Subject: Extended service to Gilroy.

1. Are there plans to put in a second set of railroad tracks to Gilroy? Is so, when?
2. Are you going to provide morning commute service from San Jose to Gilroy and are you going to provide evening commute service from Gilroy to San Jose?
3. Will there be Baby Bullet service from San Jose to Gilroy in the mornings and from Gilroy to San Jose in the evenings?
4. Will there be weekend service to Gilroy. I would like to shop at the outlets. I just don't like driving that far.
5. Once the electrification is in place do you have any plans to introduce first class service cars like they do in Europe that would give people more leg room and have electrical plugs for laptop computers? I would definitely pay more money not to have bruised knees and a more comfortable seat that reclines a little.
6. Are there planned schedule alignments with Amtrak?

Sincerely,

Hank Lawrence
2441 Sharon Oaks Drive
Menlo Park, CA. 94025-6828

Telephone (650) 854-0365

Electrification

From: Bill McFarland [billmcf@comcast.net]
Sent: Sunday, May 09, 2004 5:57 PM
To: Electrification
Subject: Way to go!

I fully support your efforts to electrify CalTrain. Please give this project your highest priority! I ride Caltrain 5 days a week to go to work, and would love to see this project come to fruition. To have a less noisy and clean system would be wonderful.

Thank you sincerely,

Bill McFarland

Electrification

From: J McGraw [mcgraw_j@hotmail.com]
Sent: Tuesday, May 25, 2004 3:47 PM
To: Electrification
Cc: marshpitman@sbcglobal.net
Subject: comment on CalTrain electrication DEIR

Tuesday, May 25, 2004.

Peninsula Corridor Joint Powers Board
1250 San Carlos Ave.
San Carlos, CA 94070

Dear Sirs:

Regarding the CalTrain Electrification Draft Environmental Impact Report, I strongly support the proposed electrification of CalTrain and urge that completion of this project be made a top priority. Electrification will mean trains that are smoother, quieter, faster, which translates to better on-time performance and a larger, more satisfied customer base.

Furthermore, significant reductions in air pollutants will result as compared with the present diesel train service. Savings in track maintenance costs may also result from the use of the much lighter engines compared with the present diesel locomotives.

Upgrading CalTrain in this manner will provide a more superior alternative to the automobile, a worthy goal.

Regards,

Jeff McGraw

Box 1161, Fremont, CA 94538

Stop worrying about overloading your inbox - get MSN Hotmail Extra Storage!

Electrification

From: Darin McGrew [dmcgrew@epocrates.com]
Sent: Tuesday, April 06, 2004 10:55 AM
To: Electrification
Subject: feedback

Okay, so electrification is good:

- the trains will be quieter (except for whistles at crossings)

- the trains will accellerate/decellerate faster (making it easier to provide full service while meeting the 4hr round trip goal)

- the trains pollute less (and can travel in a tunnel to get to the proposed unified Caltrain/BART/MUNI/whatever tranfer station)

- the trains are more reliable (an excuse to upgrade to modern equipment?)

How does the cost of electrification compare to other upgrades that would greatly enhance service?

- separating Caltrain ROW from roads, eliminating crossings (safer, and increases maximum speed, but very expensive)

- roll-on/roll-off access for wheelchair users (eliminating need for lifts and associated delays, reducing the extra time needed for a turnaround at the end of the line, and making life easier for everyone else, not just wheelchair users)

Okay, so grade separation is probably too expensive to do all at once. It can be done a little at a time in cooperation with communities that want to eliminate whistle noise, or whatever.

But while we're replacing equipment for electrification anyway, can we at least make sure the new equipment allows wheelchair users roll-on/roll-off access to the trains?

--
Darin McGrew, Release Engineering
ePocrates - "Intuitive Solutions for the Medical Mind"
1800 Gateway Drive, Suite 300, San Mateo, CA 94404 (650)227-2735,
<dmcgrew@epocrates.com>, AIM ID: DarinBMcGrew

Four Seasons

I am opposed to cutting down heritage trees for the proposed electrification. Just leave the Status Quo - The low ridership does not warrant such costly + extreme measures.

Ali McKeon - Attorney

Alexander
13 Belleau Ave.
Atherton, CA. 94027.

Caltrain Electrification
1250 San Carlos Ave.
San Carlos, CA. 94070

94070+2468

5/21/04

To Whom It May Concern:

I OPPOSE the Electrification of Caltrain.

I believe that this change provides a very marginal benefit and the negative effects largely out weigh the positive.

Electrification of Caltrain is damaging to property values of those properties along the train tracks, as this process would entail the cutting down of a large number of Heritage trees.

I definitely feel that the low ridership in this area does not constitute such drastic changes by Caltrain.

Please express my opinion at your May 25th meeting.

Sincerely,

Ali' Patricia McKeon

(Atherton Resident)

Electrification

From: Richard Mlynarik [Mly@POBox.COM]
Sent: Monday, May 24, 2004 5:00 PM
To: Electrification
Cc: Richard Mlynarik
Subject: Electrification DEIR comments

Please see http://www.pobox.com/users/mly/Caltrain-Electrification/2004-DEIR/mly-draft-eir-comments.html

Thank you.

(I'll mail you a PDF tomorrow, assuming this comment address still works.)

Caltrain 2004 Electrification EA/DEIR Comments -- Richard Mlynarik

To: Caltrain Electrification staff and consultants
1250 San Carlos Avenue
San Carlos, CA 94070-1306
From: Richard Mlynarik
Re: Comments on April 2004 "Environmental Assessment / DEIR for the Caltrain Electrification Program"

Thank you for the opportunity to provide comments upon the draft EA/EIR for the much-delayed Caltrain electrification program.

Overall comments on the document

1. **Consider system upgrade effects of an overall electrification "package".**

   Caltrain should use electrification and introduction of new rolling stock as an opportunity to radically transform and upgrade the system, much as the Transperth urban rail system did in Perth, Australia, in the early 1990s, tripling ridership.

   Rather than just running the same service with the same operational problems behind a different locomotive (the "put some lipstick on that pig" scenario), Caltrain should endeavor to use the very significant capital investment represented by any electrification program to attempt to addresses at least the following important issues:
   - long station dwell times and low average speeds caused by the inefficient interface between station platforms and passenger rolling stock
   - excessive schedule padding and poor time-keeping of Caltrain service due to ADA boarding and alighting
   - excess weight and energy-inefficiency of FRA-compliant rolling stock
   - *extreme* capital financial penalty of buying FRA-compliant rolling stock of non-standard design, which are produced only in artisanal, pre-industrialization numbers of units. Note that typical Asian or European rolling stock orders have costs around half of those borne by US passenger operators, while the equipment offers are several decades more modern.
   - high operational cost penalty of over-staffing urban passenger trains in accordance with FRA-mandated, historical freight practices
   - Caltrain's poor equipment availability and high spares ratios. (It may be argued that these figures may not be be substantially changed by CEMOF, should it ever be built, since after a certain number of decades these become are "cultural" as much as strictly mechanical problems.)

   The underwhelming cost-benefit of the program as reported in the draft DEIR reflects, perhaps quite accurately, a program too narrowly construed.

2. **Account for overall life-cycle costs and benefits of new rolling stock.**

   The overall life-cycle costs of different equipment options should be considered in light of the

issues raised above. For example, if passenger vehicle fleet replacement combined with electrification is able to deliver barrier-free boarding and improved doorways, the service improvement to average trip times may be more from level boarding *alone* than from electrification alone; the greatest and cheapest improvements will result from not undertaking such programs separately.

Similarly, combining an electrification program with a legislative and technical program to escape from or gain significant waivers from FRA regulation may save hundreds of millions of dollars in equipment costs and millions of dollars in annual operating costs.

Equipment costs need to be much more accurately accounted for than they are in the DEIR, especially given that at least 73 of the existing gallery cars will reach the end of their economic life in the early 2010s. A year 2020 scenario in which electric locomotives are purported to be hauling the existing gallery car fleet is simply not realistic.

Peer review should be undertaken to ensure that the "one for one replacement" procurement studied throughout the DEIR does not result in Caltrain purchasing more equipment than is needed to provide anticipated levels of service. Proper life-cycle accounting of maintenance and capital costs, and examination of operations improvements which can improve utilization of expensive capital equipment, may well result in revised rolling stock fleet sizes and lower initial capital costs for the program, or result in a different recommended equipment choice.

3. **No electrification to Gilroy.**

   Electrifying a line used by fewer than a hundred trains a day is universally regarded as fiscal nonsense, with huge fixed costs far outweighing minute operational benefits. Even in the most optimistic scenarios, Caltrain service to points south of downtown San Jose will be characterized by factors such as long inter-station spacings, tidal and peaky "commuter rail"-type ridership, infrequent service, together with a very challenging right-of-way control situation.

   All of these factors make the decision even more cut and dried in Caltrain's case: any money spent electrifying UPRR's (or VTA's or Caltrain's) tracks south of San Jose is money quite simply wasted, money which could be far better spent on other, net-positive Caltrain projects within Santa Clara County. This long section of line would also have disproportionately higher levels of maintenance costs associated with OCS maintenance; it would be "the gift which keeps on giving."

   Follow best global practice: Don't even think about it!

4. **Study a Minimum Operable Segment phase from San Francisco to Palo Alto.**

   Several issues are involved:
   - Financial capacity. Available financial resources may not be able to stretch immediately to the combination of 100% line electrification and 100% fleet replacement, which would yet again provide a pretext to defer all modernization of the Caltrain corridor for yet another decade. By staging construction (but not design, which should be full-corridor) to match fiscal and political commitment, Caltrain has a chance to demonstrate success and build upon it, rather than to continue making empty promises to the public.

   - VTA independence. If recent history is any guide, one of the Caltrain member agencies will

attempt to sacrifice not just its local match of Caltrain projects but also undermine Caltrain's positioning for regional allocations. San Francisco County has voted with its wallet to make Caltrain electrification a priority, and San Mateo County is poised to do so in November 2004. Approved upgrades to two-thirds of the line cannot continue to be held hostage to the political situation in one jurisdiction at the far end of the line.

Caltrain needs to demonstrate its ability to build and operate a modern and attractive service for the residents of the San Francisco Peninsula far sooner than the present funding priorities of VTA will allow.

- Downtown San Francisco extension dependency. If electrification is delayed by more than another year or so, it is quite possible that a new terminal station in downtown San Francisco and new tunnels leading to it will be completed before electrified rolling stock is available to serve it and before electrified overhead to connect it to the Caltrain line is in place.

  Given the huge borrowing costs of the DTX project, all delays in service startup are potentially catastrophically expensive, not to mention *embarrassing*.

  By removing the fiscal and political roadblock of requiring 100% fleet replacement and 100% electrification, a significant cause of uncertainty on the critical path to DTX completion can be mitigated.

By electrifying the full San Francisco to San Jose line in two stages, with Palo Alto a fairly natural break point both operationally and jurisdictionally, Caltrain may be able to better match cash flow to construction while operating much better levels of service than are available today.

With only 60% of the rolling stock and fixed installation costs -- and assuming engineering design overheads for the entire line are borne up-front -- procurement and start-up should be able to proceed with little delay. Contract options would ensure that full system build-out could proceed if, as one might expect, there is a change in the local political winds and there is a desire to build upon success.

With a comparatively small and completely modern fleet, maintenance facility needs on the initial segment of the line will be modest -- perhaps limited to a train washer and enclosed inspection platforms -- and heavier maintenance such as wheel profiling can be scheduled at the CEMOF.

5. **DB, DBO, BOOT, etc.**

Caltrain should consider design-build, design-build-operate, design-build-maintain and other "novel" contracting arrangements for both infrastructure and, especially, for rolling stock.

Not only might such arrangements result in lower life-cycle costs to Caltrain, but builders motivated by a need to keep maintenance costs under control for a contractual period of a decade or more may be able to deliver more reliable service using less equipment than is assumed in the "one for one replacement" scenario of this DEIR.

Other systems have used the opportunity created by a change in rolling stock and a change in system image to make significant improvements in work practices and to move towards more principled economic trade-offs of capital and operating budgeting.

Peer examples should be identified and studied.

6. **Rolling stock options should include non-FRA alternatives.**

   The project should consider packages of proposed rolling stock and regulatory changes which minimize capital costs and ongoing operational costs. It would be a huge mistake write the EIR and subsequent RFPs to guarantee failure by requiring FRA-unique rolling stock and consequently locking out the world rail market and locking in 19th-century operating practices.

   A combination of a new and fail-safe signal system, interlocks which physically prevent non-PTC/ATS FRA equipment from entering the Caltrain line and prevent non-FRA Caltrain equipment from exiting it, and safe, lighter-weight, contemporary-design, energy-efficient, service-proven rolling stock may be hundreds of millions of dollars cheaper to own and operate and far safer for riders than the combination of old CTC signals, New Jersey Transit locomotives and Chicago passenger cars.

   It is possible to achieve superior levels of *system* safety by combining technology and appropriate regulation than by regulation alone. The wildly successful and widely imitated German "tram-train" systems were introduced over the opposition of a regulatory agency nearly as irrational and intransigent as our FRA; the key will be to quantitatively and irrefutably demonstrate higher achievable safety levels as part of an overall rail system upgrade to international norms.

   A stated goal of the electrification is to "modernize Caltrain"; relief from very expensive and very historical Federal railroad regulations would be by far the cheapest and surest way to achieve this goal.

7. **Complete corridor electrification engineering planning early.**

   Circa 65% design for electrification infrastructure for the entire corridor from San Francisco to San Jose should be completed as quickly as possible, even if full corridor-long electrification funding is not immediately identified. This design work must be *maintained and updated* as any works take place along the Caltrain right of way.

   Modest funding should be secured as soon as possible for pre-electrification works which can be undertaken in parallel with other projects along the line.

   A primary goal of Caltrain capital projects should be to *actively* coordinate electrification preparatory work with all other projects, particularly signaling changes and track renewals and track realignments. It should be possible to excavate and install catenary pole foundations along any section of track which is booked out of use for maintenance or for some other right of way project. In this way cumulatively expensive incremental costs -- such as flagging, train and passenger delays -- are minimized and all projects proceed more smoothly.

   Caltrain is perceived as having a habit of doing the same work over and over on some sections of track; it would be a positive step if electrification broke the cycle of make-work for flaggers.

8. **The EIR needs to contain operational simulation information.**

   Real information about train performance improvements should be used to explore significant operational benefits which are not addressed in the existing document. These data are simply *not*

present in the DEIR.

For example, section 3.15.5.1 on page 3-130 claims that "travel times savings onboard Caltrain would average about three percent on express trains and 12 percent on local trains." That is all. Surely more detail can and should be provided.

But note that a 12% saving on the existing (padded) 96 minute San Francisco to San Jose local train schedule brings the journey to 85 minutes. This is within striking distance, especially when combined with boarding improvements made in conjunction with the introduction of new EMU rolling stock, and perhaps with some regulatory relief, of being able to make a round-trip in three hours with one train consist (and possibly one crew).

A SF-SJ regular-interval schedule on half-hour headways can be operated with 25% less equipment -- six trains and crews instead of eight -- given a seemingly small decrease in train running time due to improved performance of electrified equipment.

Such very significant ongoing operational savings should be accounted for, and the costs of rolling stock purchase should be decreased to account for better equipment utilization than in the one-for-one replacement scenarios assumed in the DEIR.

I again note that the benefits of modernized and electrified Caltrain service need to be studied and accounted for as more of a synergistic program than the unnecessarily narrow electrification analysis in the DEIR.

9. **Avoid NECIP; avoid Not Invented Here.**

   At all costs, Caltrain should avoid everything and everybody connected with the Amtrak North East Corridor "Improvement" Project "north end" electrification. Not only did this project have by far the most expensive electrification costs of any line anywhere on the planet, and not only was it delivered years late, hundreds of millions of dollars over-budget, and under a cloud of litigation and allegations of malfeasance, but the system appears to be over-engineered in a fashion that can only lead to a suspicion that contractual incentives were made for each ton of steel consumed.

   The aesthetics of the resulting installations are also horrific, with hugely massive forests of catenary support structures which are out of place in every circumstance, including every other electrified railway in the world.

   There are no real "unique Californian" or "unique American" issues which need to be addressed; instead a standardized overhead design standard from a major rail infrastructure provider should be adopted with as little modification as legally possible, and costs, performance and aesthetics should be measured against global best practice, not American exceptionalism.

10. **Avoid portal and flexible headspan structures** except in yards and terminals.

    Portal structures have significant aesthetic (ie NIMBY) impacts, while headspans on mainline track not only require more expensive foundations, but are problematic from a maintenance perspective.

    Given Caltrain's generally extremely generous right of way, space exists in most locations to allow side or center pole catenary suspension, and electrification design and track realignment

projects should take advantage of this.

Mechanically independent suspension of the OCS on adjacent tracks greatly simplifies electrification maintenance work, allowing other tracks to remain in service, and greatly improves reliability, by confining the effects of many mechanical failures of the overhead system to a single track. In contrast, failure of some components on a headspan structure could close down four mainline tracks at once.

Consideration should be given to allowing the use of double-channel masts, steel tube masts, or concrete masts, not just the steel H-beams assumed in the DEIR. There may be both aesthetic and cost reasons to allow contractors to suggest more appropriate materials.

11. **16th Street and Common Street grade crossings in San Francisco.**

The DEIS is silent on the San Francisco Municipal Railway's plans to spend millions of public dollars to reroute the close-headway 30 and 45 trolley bus routes to cross the Caltrain line at grade, to the benefit of the Catellus corporation.

Such a crossing of a high-voltage mainline railway overhead and low-voltage trolley bus wiring is almost unprecedented.

The standard industry reference text, "Contact Lines for Electric Railways" by Kießling, Puschmann, and Schmeider has only this to say, in over 800 pages of very detailed design information: "The only known level crossing between an electrified mainline railway and a trolley bus line is at Innsbruck [reference to a German technical paper published in 1989]."

The railway line referenced is a "rarely-used freight-only" line providing access to one industry, quite in contrast to the frequent passenger rail traffic projected along the Caltrain line into downtown San Francisco.

With headways of less than five minutes on both the trolley bus lines, and with similar bidirectional Caltrain headways at peak hours, it will be extraordinarily challenging to design a reliable system to permit this at-grade crossing.

Muni and Caltrain have demonstrated repeatedly that technical innovation is not an organizational forte of either organization; I suggest that, here as elsewhere in matters of railway practice, Caltrain simply adopt tested solutions from elsewhere in the world.

In this case, this means grade separation. Caltrain, working with the City and County of San Francisco, the Metropolitan Transportation Commission, Catellus, the San Francisco Municipal Railway, and most particularly with the Transbay Joint Powers Authority, should actively explore financing and engineering mechanisms such that either grade separation of the Caltrain line and these streets can be achieved, or that electrified Muni lines are no longer required to cross Caltrain at grade.

Specific comments on individual pages of the document

- **S-1** section **S.1**: Nowhere here or anywhere else in the document are train performance advantages quantified. This is a striking omission.

- **S-3** section **S.1**: Bullet 4 assumes locomotives, not more general electrified rolling stock.

- **S-6** section **S.2.2.3**: Attention should be paid to ensuring that substations are not oversized and overpriced for Caltrain's needs -- and not over-intrusive in their environment. Ideally, physical expansion capacity should be reserved for added power requirements of future high speed rail, or future 10 train/hour service, etc. Where feasible, electrical facilities should also be designed to minimize NIMBYism and not just specified according to the wildest dreams of power engineers.

- **S-7** section **S.2.2.4**: Transparency of bridge barriers is more an issue for *pedestrians* than just the cited "motorists".

  The horrid design mistakes of the Amtrak NECIP must not be repeated, in which massive steel plates were affixed to urban overpasses, blocking all views from the bridges in the service of some very dubious idea of "safety" -- or perhaps just unthinking expediency.

- **S-7** section **S.2.2.5**: Non-FRA rolling stock alternatives *must* be considered. By requiring that Caltrain rolling stock be built to one-off designs, at immense added cost and with dubious reliability, the proposed menu of rolling stock options guarantees failure for the Caltrain electrification program. One need look no further than the Amtrak Acela fiasco to see where FRA exceptionalism leads.

- **S-8** section **S.2.2.6**: A scenario of phased introduction should be considered, in which mixed diesel and electric operations coexist for some time. In particular, phasing of electrification first to Palo Alto with later extension to San Jose would require mixed fleet operation, but other scenarios are possible.

  Another example would have diesel locomotives hauling express trains, which require less acceleration performance, while the system's first delivered EMUs are assigned for local stopping trains. Such a scenario has a couple of possible advantages: it allows for early introduction of new electrified service before total fleet replacement is complete, it allows for stretching out of vehicle procurement costs, and it allows greater reuse of existing equipment.

  As it is unlikely that another commuter rail startup will be able absorb Caltrain's entire historical replica rail fleet at once, it seems more likely than not that Caltrain will continue to possess a (gradually-shrinking) inventory of diesel locomotives and unpowered Bombardier rail cars even after inception of electrified service. Fiscal prudence dictates that these be used unless there are compelling operating or maintenance reasons not to do so.

- **S-8** section **S.2.2.7**: I suggest that any "new technology" crossing protection should be ERTMS compatible, as that is the clear technical direction of train-wayside communications world-wide.

  Consideration should also be paid to the use of axle detectors rather than older track circuits to drive crossing prediction timers. Note that axle counters are now standard for *all* train detection in many new installations.

- **S-9** section **S.2.2.9**: As noted above, phasing should be optionally be San Francisco to Palo Alto followed by completion to San Jose.

Electrification to Gilroy does not make any operational or economic sense under any projected scenario and must be rejected before its costs drag the entire rest of the system down.

- **S-19** section **S.4** table S-3: The year 2020 scenario (Opt. 3) is simply not realistic: 80% of Caltrain's gallery car fleet will be more than 30 years old, and will have had to be replaced by this time.

- **S-20** section **S.8**: Issues to resolve must include "waivers from FRA and PRESS rolling stock 'safety' standards."

- **1-13** section **1.3.1**: Note that the Caltrain downtown extension FEIR was approved on 22 April 2004.

- **2-1** section **2.1**: "frieght" is misspelled in the third paragraph.

  The Caltrain service description should be updated to describe the 86 trains/weekday schedule which will be current "today" at the time the FEIS appears.

- **2-5** section **2.3.1** table **2.3-1**: The fleet inventory seems inconsistent.

  The "Year 2001 (80 trains/weekday)" row should be updated to the present day (assuming FEIR publication is post 5 June 2004): ie "Year 2004 (86 trains/weekday)"

  Today's Caltrain passenger fleet consists of 93 gallery cars (73 built circa 1986, 20 inexplicably ordered in early 1998), 17 Bombardier bi-level cars, and 14 disintegrating ex-VRE Budd trailers. It is unclear where the count of 19 "Other Existing Cars" comes from.

  The assumption that 93 gallery cars will be available in "Year 2020" is unrealistic: 73 of those cars will be more than 30 years old, and will have required replacement by that time.

- **2-8** section **2.3.2.1**: Portal and headspan structures should be avoided wherever possible, and, most importantly, near-future Caltrain track realignment projects should be designed -- as the Bayshore and Lawrence quadruplications inexcusably were *not*. (The exceptions are tracks in yards and terminals.)

  See general comments on headspan and portal structures above.

- **2-14** figure **2.3-5**: The identified location for PS-1 may be needed for a combination of DTX construction and 16th/Common Street grade separation, despite the fact that neither Caltrain nor TJPA engineers seem to have understood this yet.

  Further investigation should be undertaken to ensure that there is no potential conflict with these projects. A modest relocation within the identified parcels may be all that is required.

- **2-16** figure **2.3-7**: The proposed site for ATF-1A could have other development potential. Are less desirable sites closer to, say, the Oyster Point or Grand Avenue overpasses, not feasible?

  It would be interesting to examine whether the 115' by 120' site size requirement is necessary (due to physics and/or regulation), or whether there is some degree of NECIP over-engineering involved. I do not know the answer. Peer review of 25kv traction substations could be used to help

understand the requirements and perhaps to help fit the substations and other facilities within the surrounding urban and urban-industrial environments.

- **2-19** figure **2.3-10**: PS-4 appears to be sited directly within the parking lot of the existing Caltrain station. Is it supposed that relocation of the station to the vicinity of 25th Avenue will have occurred by the time electrification is installed or soon afterwards? This seems a problematic location otherwise.

- **2-21** figure **2.3-12**: PS-5 should be situated between Caltrain tracks and expressway on *east* side of the tracks if possible; that location is less intrusive, there is no other use possible; and there is less pedestrian access. Or perhaps space could be found underneath the off-ramps connecting the Central Expressway with the San Antonio Road overpass. Despite the "Commercial/Office/Industrial Land Use designation" of the identified parcel for PS-5, it seems that higher uses should be possible for it than a Caltrain autotransformer station.

- **2-23** figure **2.3-14**: ATF-2 should be sited into the Newhall Yard, slated for purchase by VTA (and the future site of the Caltrain CEMOF once the Newhall site nonsense and BART extension insanity run their courses.). In fact, VTA's SVRTC "project" (nudge, nudge, wink, wink) identifies the south-east section of this yard as the site for a BART feeding station.

  Caltrain should explore the availability of real estate within the Newhall Yard with VTA.

  If available, this should be the preferred alternative for the southern substation for the Caltrain system.

- **2-24** figure **2.3-15**: Locating an open-air substation on an over-sized and prime lot right beside a major railway station is a crazy urban design decision -- admittedly not as crazy as VTA's plans for surrounding the station with parking structures, of course.

  I suggest this ATF-2B location alternative be dropped from consideration.

- **2-30** section **2.3.2.3**: It would be useful to provide information on what level of train service (speed, headways) the specified 2 x 60MW power system is designed to accomadate as built, and what future levels of traffic might be powered by upgraded substations occupying the same footprint.

  At first glance, it certainly seems that the industrial-sized substations depicted are out of scale with what the traveler would encounter alongside and powering railway lines in Europe or Asia, and it is widely believed that the NECIP installations (pictured) were over-constructed. Do technical peers specify similar installations?

- **2-37** section **2.3.2.4**: Again, the NECIP mistake of using opaque bridge protection barriers must be avoided.

- **2-37** section **2.3.2.5**: Non-FRA rolling stock options must be considered.

  Add an additional option: "Non-FRA Electric Multiple Units", and note that while the vehicle would not have to be "specially procured and designed", and while it would cost around half of what USA-specific equipment would, extensive negotiation with and lobbying of the FRA would be involved, almost certainly accompanied by installation of a more advanced (and expensive)

signaling system.

- **2-43** section **2.3.2.6**: See comments on page S-8 re mixed diesel/electric fleet and mixed operation.

- **2-43** section **2.3.2.7** See comments on page S-8 re constant time crossing predictors.

  Note also that a cab signal system incorporating automatic train stop may be a desirable next step to undertake, especially in order to obtain relief from FRA structural "safety" regulations.

- **2-44** section **2.3.2.8**: It is certainly the hoped that planning will be undertaken for "third and fourth track improvements" beyond those already constructed.

  OCS infrastructure should be designed to facilitate, or at the very least not actively impede, such capacity amplification at all locations along the corridor where it is feasible to do so.

- **2-45** section **2.3.2.9**: Staging should be San Francisco to Palo Alto. Electrification to Gilroy should not be pursued any further than this study.

- **2-46** table **2.3-3** and table **2.3-4**: This table of rolling stock costs is nonsensical.

  There are many problems with this section. Firstly, one-for-one replacement of diesel-powered equipment is assumed, ignoring potential improvements in equipment availability through faster turns. See my general comments above about the need for feedback into the cost model from operational simulation, and also my comments on the August 2000 (my, how time flies, and to such little effect) "Draft Assessment of Electrically Powered Rolling Stock Equipment".

  It also ignores the possibility that a better-maintained (possibly under a design-build-maintain contract) fleet of low age will have better availability than Caltrain's existing fleet. Certainly Caltrain's present-day 28% passenger car and locomotive spares ratios are numbers which would raise eyebrows at a well-run railway outside the USA.

  Secondly, it is still completely unclear what the "Other Existing Cars" category represents: as noted above of table 2.3-1, Caltrain owns 17 non-gallery Bombardier passenger cars as well as 14 old demotored Budd cars, but 19 of nothing. This level of imprecision throws the fleet requirement and rolling stock acquisition cost calculations into some doubt.

  Even worse than one-for-one replacement, the EMU option appears to replace 115 loco-hauled cars with 120 EMUs. The logic of doing so is very, very hard to understand. Comparison with other suburban operators suggests that an fleet of 75% to 80% of that size (eg 32x3 car, 24x4) should be more than adequate to provide that proposed level of service.

  I also believe that the implied EMU unit prices are excessive, as I noted in comments on the August 2000 report on rolling stock.

  The estimated fleet size for the proposed levels of service should also be subject to review. From Table 2.3-8 on page 2-50 one deduces that the proposed 2008 level of service (98 trains/weekday) is more or less just the a circa-2001 Caltrain timetable of 80 trains/day supplemented by 18 express ("bullet") trips, ie five more express round-trips per day than will be offered in June 2004. At most this should require 3 more trains than current operations, for a total of 19 or 20 trains

peak demand: support of this amount of extra service should be well within the reserves of Caltrain's elephantine equipment spares ratio. It is unclear where the requirement for a total of 24 electric locomotives and 115 passenger trailers -- let alone 120 EMUs -- comes from.

Repeating earlier remarks, the assumption that 93 gallery cars will still be in service in 2020 is unrealistic; by that time Option 1 (replace locomotives) and Option 3 (replace locomotives and passenger cars) will be identical. This shows the estimated capital costs of tables 2.3-3 and 2.3-6 to be **nearly completely meaningless** and embarrassingly shoddily developed.

A proper accounting should consider the bulk of the gallery car fleet to be approximately 2/3 depreciated in 2008 and end of life long before 2020; and new rolling stock purchased for start of electrified service should likewise be depreciated over, say, a 25 year lifespan in order to create any sort of meaningful comparative table of capital costs for the different rolling stock options.

This entire section, and the conclusions reached as a result of it, need to be completely reinvestigated and completely rewritten. It is economic nonsense.

- **2-47** table **2.3-5**: This table should include separate San Francisco to Palo Alto and Palo Alto to San Jose phase costs.

- **2-48** table **2.3-6**: Garbage in, garbage out: See my comments on the contents of the tables from which this table is derived.

- **2-49** section **2.3.3.3**: Absent any consideration of the operational advantages of the improved performance of electrically powered equipment, the tables of projected operating costs are of little use ... other than as arguments against undertaking the electrification program.

  If faster turn times allow lower crewing costs, the slight extra operating cost of an electrified system show might instead turn into a small savings.

  If non-FRA equipment and practices are procured and implemented, One-Person Operation of trains will result in millions of dollars of annual costs.

  One-for-one replacement of diesel equipment results, unsurprisingly, in little more than one-for-one replication of existing cost structures, with the added burned of OCS maintenance.

- **3-46** section **3.5.4.2**: Why wasn't this structural analysis and crown notching combined into the recently-awarded 2004 tunnel rehabilitation contract? No, don't tell me!

  Caltrain: where our motto is "If it's worth doing once, it's worth doing three times."

- **3-75** section **3.9.1.2**: See comments above on TPS placement, referencing pages 2-16 through 2-24.

- **3-93** section **3.11.1.3**: Non-FRA rolling stock, with significantly lower axle loadings, is likely to induce much lower levels of noise and vibration. In addition, noise mitigation is an active issue in rail vehicle design outside the USA (note in contrast that the FRA mandates *minimum* train noise levels in the Caltrain corridor.)

- **3-131** table **3.15-6**: Well, if you're trying to kill off the electrification program, presenting your

data in this format is surely the best way to do it. VTA loves ya', baby!

- **4-5** section **4.1.2**: assumes locomotives.
- **4-16** section **4.2.9**: Note that electrification construction noise and interruption can be significantly mitigated by combining works on electrification with other projects along the right of way.

Richard Mlynarik
Last modified: Mon May 24 16:56:37 PDT 2004

Electrification

From: Robert Neff [neff@opus.labs.agilent.com]
Sent: Thursday, April 29, 2004 12:21 PM
To: Electrification
Subject: EIR -Environmental Consequences

Hello,

I think the energy savings due to electrification should have higher prominence in the project summary.

I read through the summary of the EIR, and was surprized that there was little mention of the reduction of energy use when going to electrification. I'm glad to see that was considered in more detail in Chapter 3. I think the fact that switching to electricity reduces total energy consumption by almost 40% is an important detail and has benefits as an ongoing reduction in CO2 emissions. The energy savings also benefit Cal Train costs in the long term (though probably not enough to compensate for the construction costs by themselves). (see page 3.86).

I'm surprised that option 2 (Electrification with EMUs) is not significantly more efficient than option 1 (locomotives), because I was expecting the EMU option to result in a much lighter weight for the train, and therefore less energy use. Also EMUs enable much shorter trains during non-peak periods, which could significantly reduce energy use as well -- Not every train has to be 4-5 cars long, and the incremental cost of more frequent, shorter trains would be smaller.

-- Robert Neff

Mixed Signal Electronics Department, Agilent Labs robert_neff@agilent.com (650)485-6220

PENINSULA CORRIDOR JOINT POWERS BOARD (JPB)
THE AUTHORITY THAT OPERATES

Caltrain

WELCOMES YOU TO THE

CALTRAIN ELECTRIFICATION PROGRAM
DRAFT ENVIRONMENTAL DOCUMENT REVIEW
PUBLIC MEETING

RECEIVED
MAY 01 2004
MIG, BERKELEY

Thursday, April 22, 2004 • 6:00 - 8:00 pm • San Francisco County
Saturday, April 24, 2004 • 10:00 am - 12:00 noon • Northern Santa Clara County
Wednesday, April 28, 2004 • 6:00 - 8:00 p.m. • Southern Santa Clara County
Saturday, May 1, 2004 • 10:00 am - 12:00 noon • San Mateo County

COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

WE OPPOSE THE CALTRAIN ELECTRIFICATION PROGRAM BECAUSE:

(C) IT IS NOT NECESSARY TO EXTEND CALTRAIN TO THE TRANSBAY TERMINAL IN SAN FRANCISCO. (HAVE THIS PROJECT ON THE ENTIRE CALTRAIN SYSTEM IN ORDER TO)

(C) (2) AT HUGE EXPENSE IT DOES NOTHING TO ~~INCREASE~~ SIGNIFICANTLY INCREASE RIDERSHIP

(3) THE SAME DOLLARS COULD BE USED INSTEAD TO EXTEND ~~CALTRAIN~~ CALTRAIN TO (SAN FRANCISCO TRANSBAY TERMINAL) - WHICH WOULD INCREASE RIDERSHIP

(C) (4) IT IS UGLY - WE JUST SPENT MILLIONS OF $ TO PUT WIRES UNDER GROUND; THIS PROJECT REVERSES ALL THAT AND HAS A HUGE NEGATIVE EFFECT ON THE VISUAL ENVIRONMENT.

(C) ~~THERE ARE FAR MORE EFFECTIVE~~ OTHER WAYS OF USING THIS MONEY WOULD HAVE FAR MORE POSITIVE EFFECTS ON RIDERSHIP AND CUSTOMER SATISFACTION

Name: ROBERT OLTON Address: 1246 NORTH RD BELMONT, CA 94002 Phone:

Please hand in your comment card at the end of the meeting or mail it to:
Erik Olafsson, Senior Planner *San Mateo County Transit District* *1250 San Carlos Avenue*
P.O. Box 3006 *San Carlos, CA 94070-1306* *Mail by May 25, 2004*

Electrification

From: ROlton1@aol.com
Sent: Friday, May 14, 2004 2:21 PM
To: Electrification
Subject: Please vote NO on Electrification!

Dear Caltrain:

Attached please find a short letter requesting you to vote NO on the proposed Electrification project.

We believe the costs of this proposal are WAY out of line for the proposed benefits, and that a FAR BETTER use of the money--and something that would have a more beneficial effect on the environment--would be to use this money to extend CalTrain to a downtown San Francisco terminal.

Our reasons are in the attached letter.

Finally, we believe that if this proposed project is implemented, it will poison the political environment for any future CalTrain projects. Voters will say "Half a billion dollars thfor THAT? All that ugliness and so few benefits? Why approve any other money for those people to waste. You will be perceived as having created something as useless as the BART extension to Millbrae!

Thank you for voting NO on the Electrification proposal!

Sincerely,

Robert Olton
(on behalf of several CalTrain riders at Hillsdale)

Robert M. Olton

1246 North Rd. **Belmont, CA 94002** **650-595-5866**

Erik Olasfsson, Senior Planner
San Mateo County Transit District
1250 San Carlos Ave.
P.O. Box 3006
San Carlos, CA 94070-1306

DUL_MT MAY17'04 AM10:19

May 9, 2004

Dear Caltrain:

I am a daily CalTrain rider (Hillsdale to San Francisco), and I would like to voice some strongly-held negative comments about the proposed electrification program. Please note: the comments below reflect not only my own opinions, but also the opinions of many other riders I have talked with on CalTrain.

In a word, please DO NOT implement the proposed Electrification program!

We strongly object to spending far more than half a BILLION dollars for a program that:

- **Does NOT really increase ridership. (Note: the ridership increases projected in the EIR—roughly 4,000 riders per day--result from adding more trains to the system, NOT from electrification.** The additional trains could easily be provided WITHOUT electrification. Indeed, there is NO EVIDENCE that electrification itself would produce any increase in ridership at all!).

- **Is NOT required for extending CalTrain to a downtown San Francisco terminal (except for the final 1-2 miles.) There are low-tech, Amtrak-proven ways of providing this extension WITHOUT electrifying the entire CalTrain system. (And these would NOT require exotic fuels or hybrid locomotives.)**

- **Extending Caltrain to a downtown San Francisco is the MOST IMPORTANT "Non Project Alternative" for the use of this money, yet it is not even mentioned in this EIR! Why not?** After all, NOTHING will make as much difference to CalTrain ridership (and hence to the environment) as this extension. Moreover, the converse is also true: WITHOUT such an extension, anything else you do to CalTrain will probably have only marginal effects on ridership.

- **It's UGLY! Electrification would paint a huge swath of ugliness all up and down the peninsula, and have a terribly NEGATIVE environmental effect on the visual environment.** I live in Belmont, and we have just spent millions of dollars to

put wires and etc. underground; As a result the CalTrain station has become the centerpiece of downtown Belmont. In contrast, this proposal would involve putting wires back up again and looking really UGLY.

- **If enacted, we believe this project will poison the political environment for any future CalTrain projects.** The voters wills say "Half a billion dollars for THAT? All that ugliness and so few new riders? Why approve any other money for those people to waste! **You will be perceived as having created something as useless as the BART extension to Millbrae!**

For all these reasons, please DO NOT approve the proposed Electrification project!

Instead, please use the money for a downtown extension, with its dramatic increase in ridership! That's what everyone wants, it will make FAR more difference than anything else, and it leaves room for electrification in the future if that should prove more desirable later on.

Thank you for voting NO on the electrification proposal!

Sincerely,

Robert Olton
(on behalf of several CalTrain commuters at Hillsdale).

Electrification

From: Judith Orasanu [Judith.Orasanu@nasa.gov]
Sent: Wednesday, May 26, 2004 12:05 AM
To: Electrification
Subject: NO to Caltrain electrification

Gentlemen:

I OPPOSE the plan to electrify the Caltrain commuter system.
Following are my reasons.

1. California is in fiscal crisis. Electrification costs are high, both for the initial conversion, and especially for the operating and maintenance costs.
2. Upgrading an underutilized commuter system will not increase ridership. 3. While we are promised that electrification will improve air quality along the train corridor, in fact producing the electricity to run the trains will negatively affect air quality in other locations. This is simply a matter of shifting around the dirty air.
4. The overheads for electrification are profoundly ugly; they pollute visually.
5. Electrification will not reduce the noise from train horns or crossings. 6. Trees will be cut down in vast numbers during the electrification process. Electrification will convert the Peninsula into a concrete, industrial wasteland, destroying the charm of Menlo Park and other towns that prize the trees that now provide a visual screen against the train tracks.
7. Upgrading an obsolete, 19th century technology in the 21st century makes no sense.
8. Heavy rail for short haul commutation is like killing flies with sledgehammers.

Thank you for your consideration.

Judith Orasanu
1621 Stone Pine Lane, Menlo Park, CA
--
Judith M. Orasanu, Ph.D.
Distributed Team Decision Making Group
Code IHS,System Safety Research Branch
M/S 262-4, (FOR FEDEX DELIVERY: B262, Room 290-C)
NASA-Ames Research Center
Moffett Field, CA 94035-1000
Tel: (650) 604-3404
FAX: (650) 604-3729
email: Judith.Orasanu@nasa.gov

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WELCOMES YOU TO THE

CALTRAIN ELECTRIFICATION PROGRAM
DRAFT ENVIRONMENTAL DOCUMENT REVIEW
PUBLIC MEETING

Thursday, April 22, 2004 • 6:00 - 8:00 pm • San Francisco County
Saturday, April 24, 2004 • 10:00 am - 12:00 noon • Northern Santa Clara County
Wednesday, April 28, 2004 • 6:00 - 8:00 p.m. • Southern Santa Clara County
Saturday, May 1, 2004 • 10:00 am - 12:00 noon • San Mateo County

COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

WHAT IS THE DIFFERENCE IN TRAVEL TIME BETWEEN THE ELECTRIC LOCOMOTIVE & EMU TRAIN OPTIONS?

IN GENERAL: THE SOONER WE ELECTRIFY THE BETTER!

~~CAN I GET A COPY OF THE DRAFT EIR?~~ (EXEC. SUMMARY)

Name: JACK PERRY Address: 1512 CORMORANT CT. SUNNYVALE 94087 Phone: (408) 738-2925

Please hand in your comment card at the end of the meeting or mail it to:

Erik Ólafsson, Senior Planner *San Mateo County Transit District* *1250 San Carlos Avenue*
P.O. Box 3006 *San Carlos, CA 94070-1306* *Mail by* ***May 25, 2004***

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COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

I am in full support of the electrification of Caltrain. An electric train line would benefit the entire peninsula corridor. I heard petroleum might run out in 10 years or so. We all will have to depend on electric trains for long distance travel in the future. Caltrain has the potential to become a welcome an electric rail line. This could help the environment for California's bright future.

Name: Nick Perry 4296 Alma Wilkie Way Address: Palo Alto, CA 94306 Phone: 650-857-1204
Email: Chez City 2685@hotmail.com Email: Chez City 2685@hotmail.com

Please hand in your comment card at the end of the meeting or mail it to:

Erik Olafson, Senior Planner *San Mateo County Transit District* *1250 San Carlos Avenue*
P.O. Box 3006 *San Carlos, CA 94070-1306* *Mail by May 25, 2004*

Electrification

From: Diana Peterson [diana_peterson123@yahoo.com]
Sent: Tuesday, May 25, 2004 11:51 PM
To: Electrification
Subject: concerns about electrification EIR

Hello,

I have grave concerns over the electrification environmental impact report. I believe that:

--the damage to trees in the area is *very* significant, much more so than is understood by most in the community
--that a major expense of electrification would be incurred, only to be ripped out and re-done when the High Speed Rail goes in
--there would be a very significant impact to neighbors along the rails, without a corresponding benefit.

We live directly on the tracks in Menlo Park, and will be actively voicing our concerns and banding together with Atherton, RC, PA, etc to insure the our concerns get heard and addressed! This EIR should not go through at is

-Diana Peterson
Menlo Park

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Electrification

From: R. P. [rrrp67@yahoo.com]
Sent: Tuesday, May 25, 2004 9:58 PM
To: Electrification
Subject: Caltrain Electrification and Associated EIR

Caltrain Staff,

I oppose your electrification plans in their current state.

The current plan does far too much damage to existing trees without significant mitigation steps. Specifically, I refer to the Atherton Menlo Park corridor but my opinion holds for most of the Right-of-Way.

Second, besides the initial environmental impact it appears that little consideration was made to completing electrification AFTER, or at least in conjunction with, grade separation. This impact, completing electrification twice, seems unnecessary and wasteful of physical, environmental and financial resources.

These are my comments and you may contact me to discuss them further.

Russ Peterson

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E-mail message

DUMT NOV 23 '04 09:06
REC. BY MAIL 5

From: MPetitjean@webtv.net(Margaret Petitjean)
Date: Wed, May 26, 2004, 8:58am
To: Electrification@caltrain.org
Cc: Governor@Governor.ca.gov, President@whitehouse.gov, WLM@jsmf.com, Bobcast444@aol.com, Tweil@igc.org, annagram@mail.house.gov, senator@boxer.senate.gov, senator.sher@sen.ca.gov, David.Valenstein@fra.dot.gov, senator@feinstein.senate.gov, e63@cpuc.ca.gov, magic@ecomagic.org, CITY.COUNCIL@MENLOPARK.ORG, mcavoyi@samtrans.com, JimBigelow@yahoo.com, joe.simitian@asm.ca.gov, DSmith@menlopark.org, webmaster@baaqmd.gov, mchurch@co.sanmateo.ca.us, AaronBerez@Yahoo.com, smartgrowth@abag.ca.gov, ashok_aggarwal@city.palo-alto.ca.us, stucohen@igc.org, Michael.N.Lewis@Parsons.com, paynec@samtrans.com, david@ecomagic.org, Diana@DianaDiamond.com, cdilauro@aol.com, Albtor@aol.com, Frankli@quiknet.com, matt.welbes@fta.dot.gov, jdeirossi@aol.com, LinfieldOaks@YahooGroups.com, MPETITJEAN@webtv.net, martinengel@earthlink.net, city_council@city.palo-alto.ca.us, dsboesch@menlopark.org, info@mtc.ca.gov, boardsecretary@caltrain.com, npc@nonoise.org, frits.vanderlinden@sun.com, publicrecords@baaqmd.gov, Ron.Ries@fra.dot.gov, simpson@carroll.com, r9.info@epamail.epa.gov, BoardSecretary@samtrans.com, senator.speier@sen.ca.gov, loma.prieta.chapter@sierraclub.org, jhill@co.sanmateo.ca.us, mnevin@co.sanmateo.ca.us, rosejg@co.sanmateo.ca.us, mchurch@co.sanmateo.ca.us, oleg@aol.com, ClaudiabeckScott@yahoo.com, donnae@bonair.stanford.edu, editor@cAlmanac.com, editorial@paloaltodailynews.com, jrahimi@menlopark.org, feith.ken@epa.gov, kcb@cpuc.ca.gov, joseph_kott@city.palo-alto.ca.us, readerwire@paweekly.com, nhc@cpuc.ca.gov, Holtk@samtrans.com, rundell1@leland.stanford.edu, editorial@paloaltodailynews.com, letters@smindependent.com, jskatz@stanford.edu, cdpiercy@stanford.edu
Subject: Fwd: NPC Library: Noise: A Health Problem (EPA, 1978)

Comment Re: Misnomer in the Environmental Assessment/Draft Environmental Impact Report

A vote for electrification. The inference that the diesel train noise and horn blasts are an "annoyance" shows gross ignorance of the health hazard of noise.

Forwarding decades-old report from the EPA. It is the responsibility of the polluter (Caltrain) to recognize and research the further ongoing studies and investigations into the lethal effects of the noise pollution of

the trains and horns.

For instance Acoustic Trauma of the horn blasts can buckle the knees (he/she sat or lay on the tracks or didn't move), is capable of "freezing" from the "startle effect" or the "looming effect" of the combination of the monster train and the loud blasts. The forces can disorient with loss of balance.

Hundreds of people have documented their sleep-deprivation which, in itself, is undeniably a serious health hazard, with the resulting fatigue, tinnitus, many other hearing and nerve and muscle medical problems, and other off-track accidents. It is, therefore, unconscionable to call this abuse of high blood pressure, heart and brain attacks, etc. from noise assault as merely "annoyance" in a million dollar environmental impact report.

Updated independent housing acoustic engineering reports and knowledgeable medical opinions such as from those in our group who have previously testified should be included in the final report. To do less is negligence.

It should be noted that Ms. Maria Pang, Environmental Manager promised to call and discuss the statements to be included in the EIR. She failed to do so, which begs the question: Are you really serious about including the resident stakeholders as required?

Delivered-To: mpetitjean@webtv.net
From: CITZ4dbABATE@webtv.net
Date: Wed, May 26, 2004, 7:47am
To: MPetitjean@webtv.net
Subject: NPC Library: Noise: A Health Problem (EPA, 1978)

Included Page: NPC Library: Noise: A Health Problem (EPA, 1978)

mail

Write an e-mail message

From: CITZ4dbABATE@webtv.net.
( )

To:

Cc:

Subject:

Erik Olafsson, Sr. Planner
San Mateo County Transit District
1250 San Carlos Avenue
P.O.Box 3006
San Carlos, CA 94070-1306

Mr. Jerome Wiggins
Program Specialist, Office of Planning and Programming'
U.S.Department of Transportation
Federal Transit Administration, Region IX
201 Mission Street, Suite 2210
San Francisco CA 94105

Nova Blazej, Environmental Planner
Federal Activities Office
Environmental Protection Agency
Region IX, 75 Hawthorne Street
San Francisco, CA . 94105-3901

Gentlemen:

The enclosed e-mail was returned. We assume that you closed the comment period.

When the FRA's docket for comments on the train horn noise was closed it was approximately one week later than the stated date. Therefore, it would be appreciated if you would consider the enclosed comment.

It is astonishing that so little concern was given to the recognized

public health hazard of the noise assault which results from Caltrain and its horns.

Also, it is incomprehensible that the EPA's response to the EIR completely ignored the noise impacts.

There are numerous doctors and lawyers ready to take this matter into court.

Respectfully,

Margaret Petitjean, 489 Waverley St,, Menlo Park, CA. 94025
(650) 322-7154

ccs.

Electrification

From: Win Reis [wreis@yahoo.com]
Sent: Monday, May 24, 2004 4:54 PM
To: Electrification
Subject: Public comment

I wholeheartedly support electrification, but only as long as it includes two other components: reducing the number of stations and increasing the amount of parking at each station.

Caltrain provides a complete transit solution for a small percentage of riders. Most riders drive or take a bus to a station and then take a bus or shuttle van at the end of their trip.

In order to speed transit times, Caltrain should look at reducing the number of stops by 25-50%. The following stops could serve as good examples:

either Sunnyvale or Lawrence
San Antonio
Atherton
San Carlos or Belmont
Hayward Park
Burlingame or Broadway
San Bruno

The bottom line is that each stop adds to travel times. Yes, some commuters would need to travel further to reach a station, but the faster Caltrain transit time could help offset that additional time.

The major cost challenge this presents is that parking would need to be significantly increased at stations near those being eliminated. However, combined with electrification that will improve acceleration and speed, this change could significantly decrease travel times.

Sincerely,

Win Reis
San Mateo, CA

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Electrification

From: Arthur Ringham [a.ringham@sbcglobal.net]
Sent: Monday, May 03, 2004 2:11 PM
To: Electrification
Cc: jjanz@tzllp.com; jrobinson@ci.atherton.ca.us; sbarker@ci.atherton.ca.us
Subject: Comments on Electrification Draft EIR

OVERHEAD WIRES ARE UGLY

Although the EIR claims many benefits of electrification, it is obvious that the overhead wires and related supports of the OCS would create a permanent eyesore along the entire Caltrain corridor. The current trend in many cities is to require the undergrounding of utilities with new construction to reduce visual pollution. The OCS would be a major step backwards from the standpoint of visual impact. The EIR goes out of its way to deny and downplay negative visual impacts of the OCS and makes misleading claims about mitigation of negative visual impacts with landscaping and screening. Many of the photographs in the EIR related to visual impacts appear to have been carefully staged or selected to create the impression that negative visual impacts are less than reality. These blatant attempts to mislead the reader raise doubts about the objectivity and credibility of the entire EIR. Rather than deny negative visual impacts the EIR should admit them as a price to be paid for benefits of electrification.

Suggestions for eliminating the OCS are presented below.

ELECTRIFICATION TIMING IS QUESTIONABLE

The Draft EIR appears to be based on the premise that electrification of the Caltrain Corridor would precede the implementation of the proposed California High-Speed Rail System. The second paragraph of the summary section S.2.2.1 (Overhead Contact System) states that this (Caltrain electrification) system is compatible with high-speed rail and will accommodate future development of high-speed rail in the Caltrain corridor without any significant overhaul of the electrification system.

Based on the plans in the Draft EIR of the proposed California High-Speed Train System, the following major construction steps would be required along the Caltrain corridor to implement high-speed rail:

1. Adding two sets of tracks along the entire Caltrain right-of-way, increasing the total number of tracks to four.

2. Constructing grade separations at all crossings which would require raising and/or lowering the tracks at many crossings where grade separations do not already exist.

3. Modifying existing grade separations to accommodate four tracks.

4. Adding and later removing two sets of temporary tracks along most sections of Caltrain right-of-way to maintain service during construction of the high-speed-rail system.

If electrification, including the Overhead Contact System, were implemented prior to installation of the high-speed-rail system, the OCS overhead wires and supports would have to be reconfigured several times during the implementation of high-speed-rail. This would constitute a major overhaul of the

electrification system and involve significant cost.

RECONSIDER TIMING AND OCS

Since the proposed California high-speed-rail system is planned to be an electrified system, consideration should be given to coordinating implementation of Caltrain electrification with the implementation of high-speed-rail even if this means delaying electrification. This could eliminate the costs of multiple reconfigurations of the OCS overhead wires and supporting structures that would otherwise be necessary if electrification were to precede high-speed rail.

Coordination with the California High-Speed Rail Authority should also be considered with regard to the possible use of a third rail system instead of OCS. The Caltrain Electrification Program study previously withdrew the third rail system from consideration for two major reasons.

First, people safety, which requires controlled access to the rail corridor to prevent accidental contact with the electrified third rail. This would not be a problem with the high-speed rail system since it would be grade separated along the entire Caltrain corridor, with controlled access similar to BART where the people safety issues have been resolved.

The second reason was that the power configuration of third rail (low voltage DC) would not be compatible with that planned for California high-speed rail (high voltage AC). If this incompatibility could be resolved, the third rail system would provide the following advantages:

1. It should cost less to install than OCS. An economic analysis should be made to quantify the difference in cost.

2. It would avoid the negative visual impacts associated with the poles, supports and overhead wires of OCS.

3. It should cost less to maintain than OCS since maintenance work would be done at grade level.

4. It would not have adverse impacts on heritage or significant trees along the right-of-way and would avoid the costs of ongoing tree trimming to maintain safety clearance from the OCS wires.

Caltrain and the California High Speed Rail Authority should jointly explore ways to deal with the power incompatibility (perhaps special locomotives which could operate from either a third rail or OCS power source). If this incompatibility could be resolved, the advantages of third rail should benefit Caltrain and the people along its right-of-way. Third rail could also be feasible in other urban areas to be served by California high-speed rail where overhead OCS systems would have a negative visual impact.

FUNDING CONSIDERATIONS

Because of California's financial situation, availability of funding will ultimately determine what gets implemented and when. Hopefully it will be possible to coordinate Caltrain electrification with the California High-Speed Train System if and when they are funded. This should involve less overall cost than if the two programs are implemented separately.

In any event every effort should be made to avoid the ugly overhead wires.

Thank you very much for your consideration.

Arthur J. Ringham

Electrification

From: sbtanenb@ix.netcom.com
Sent: Tuesday, May 04, 2004 6:21 AM
To: Electrification
Subject: electrification

I support this plan to make Caltrain cleaner and faster.

Sara Tanenbaum Schneider
South San Francisco

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Saturday, May 1, 2004 • 10:00 am - 12:00 noon • San Mateo County

COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

FRA COMPLIANT EQUIPMENT IS GENERALLY HEAVIER AND MORE COSTLY THAN EXISTING PASSENGER EQUIPMENT. I WOULD THINK THAT YOU COULD HAVE THE ~~JPB~~ JPB AND BOTH SAMTRANS TO USE A MORE EFFICIENT TYPE OF PASSENGER EQUIPMENT (THIS IS BETWEEN FREIGHT AND PASSENGER TRAIN), SO FAR AS THE OPERATING BETWEEN SAN JOSE AND SAN FRANCISCO, YOU COULD (THEN) USE FRA-COMPLIANT EQUIPMENT — VERY FEW CARS SHOULD BE NEEDED AS COMPARED TO THE ENTIRE FLEET. ALSO HIGH-SPEED RAIL WILL NEED TO USE LIGHT WEIGHT EQUIPMENT IN ORDER TO MAKE THEIR TRIPS BETWEEN SF AND LA — THAT'S A GIVEN!

Name: Walt Strakosch Address: 6 EUCALYPTUS ROAD MILL VALLEY CA 94941 Phone: 415 388-6266

Please hand in your comment card at the end of the meeting or mail it to:

Erik Ólafsson, Senior Planner *San Mateo County Transit District* *1250 San Carlos Avenue*
P.O. Box 3006 *San Carlos, CA 94070-1306* *Mail by May 25, 2004*

Electrification

From: Jerry Secrest [secrest@ix.netcom.com]
Sent: Wednesday, May 12, 2004 8:41 PM
To: Electrification
Cc: letters@almanacnews.com
Subject: comments on electrification

Please see my comment in the attached file

Caltrain Electrification
1250 San Carlos Ave
San Carlos, CA

Subject: Comments on Caltrain Electrification Program and a suggestion

I propose Caltrain put the Electrification Program on hold and pursue a program to significantly cut riders travel time door to door. Cutting travel time would increase ridership and increase the Caltrain service value. Cutting door to door travel time may increase revenue and operating margin.

The Electrification Program needs to be put on hold as it does not significantly improve service but costs a minimum of 600 million dollars. The program does improve air quality along the Caltrain route but does not in the region as the electricity needs to be generated elsewhere. Certainly, reducing noise along the route is a program benefit. Electrification is intended to improve the Caltrain image, this is doubtful if the program does not improve value to users.

The alternative to the Electrification Program is a project to improve the door to door time for most riders. There are several ways to improve door to door time. These can be evaluated and implemented for much less money than electrification. One possible way to achieve shorter door to door time is a coordinated mixed transit system of on-line computers, vans and trains. Here a possible sequence a rider might use to go from a home or office on the peninsula to a home or office in San Francisco:

The rider goes to the Caltrain webpage and inputs the starting and endpoints for their trip with the desired time.
Caltrain matches the request with the train schedule and available van seat(s) at both ends. The rider accepts the schedule.
The user is given a reservation, charged via a credit or debit card, and a ticket is printed out on their computer.
At the appropriate time, Caltrain dispatches a van to pick up the rider and other riders in the same area using the same train.
The van picks up riders and delivers them to the Caltrain station.
The train is boarded and the user goes to their destination station.
The rider uses information on the ticket to board a specific van at the destination terminal.
The van delivers the rider to the destination door.

The technology suggested here is available and is being used today to make airline reservations, route robots through warehouse, and make purchases on the web.

I strongly suggest that Caltrain broaden their view to include

technology outside of engines and cars to make improvements in service and value to their riders. After the door to door improvements are made, Caltrain can work on reducing train time. One possibility is a hybrid combustion-electric system that does not require overhead electrical lines.

Jerry Secrest
250 Willowbrook Dr
Portola Valley, CA 94028
650 851 8142

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COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

Make sure that regenerative breaking coupled with energy ~~use~~ efficiency comparison is made between electrification & the no-build alternative

Name: Ira Stallman Address: 19740 Braemar Dr Saratoga Phone: 408 867-9797

Please hand in your comment card at the end of the meeting or mail it to:
Erik Olafsson, Senior Planner *San Mateo County Transit District* *1250 San Carlos Avenue*
P.O. Box 3006 *San Carlos, CA 94070-1306* *Mail by May 25, 2004*

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COMMENT CARD

Please give us your comments on the Caltrain Electrification Program:

1. Please do it, yesterday!
2. Foreclose on SCC Row.
3. Terminate Service at Menlo Pk until SCC pays up.

Name: Vivi Stallmann Address: 19740 Braemar Drive Saratoga Phone: 408 867-9787

Please hand in your comment card at the end of the meeting or mail it to:
Erik Ólafsson, Senior Planner *San Mateo County Transit District* *1250 San Carlos Avenue*
P.O. Box 3006 *San Carlos, CA 94070-1306* *Mail by May 25, 2004*

May 26, 2004

DULMT MAY27'04 AM 8:41

Dear Mr. Olafsson,

Thank you very much for the Environmental Assessment/Draft Environmental Impact Report on the Caltrain Electrification Program. I've looked through it, and must say that it is an excellent, very professional job, and hope that, eventually, the work will be carried out as recommended. It will be very much needed if Caltrain's underground extension to a downtown San Francisco terminal is ever carried out, and even more needed if California ever gets started on its High Speed Railroad program.

I'd also like to see the entire Caltrain right-of-way fully enclosed by wall or fence, and all grade crossings eliminated, between San Francisco and San Jose (the town-by-town approach followed by San Carlos and Belmont is pitifully inadequate and expensive); push-pull operation eliminated in favor of multiple unit; and all gallery coaches replaced by true double decks with low floor loading. "Baby Bullets" aren't enough; we won't get true rapid transit performance until we can accelerate all trains, including local trains that make all stops. That's a tall order, I know, but must be pursued in some form if we are to get the full advantage of electrification.

I'm enclosing copies of some pages on recent equipment being developed for the French National Railways (SNCF) that I found in a directory of French motive power that a friend brought me from Paris. I wish I had similar information from other countries, particularly Germany, as the technology you see is pretty much German. You probably know that the big German railway equipment manufacturing combine Adtranz was recently broken up and mostly sold to Bombardier, with the French electrification contractor Alstom buying the rest. This means that Bombardier now owns over half of German railroad manufacturing; only Siemens remains unaffected. This means that French and Canadian manufacturers now produce most German proprietary designs, and it's obvious that the French are taking advantage of this. The first of the four enclosed designs are for

(over)

the three double deck designs shown in your EIR. The second is for an improved design in which nearly all electrical equipment is housed in rooftop units. The remaining designs are both single deck, which Caltrain wouldn't want, but I'm including them because they are interesting designs, with low floors. The first is all-electric; the second is a diesel-electric which is also available as a straight electric when operating under wire. Who knows? Perhaps Bombardier would be able to modify its double-deck designs to suit American conditions. I never see freight trains on Caltrain's peninsula segment, although I must agree that the Gilroy segment would carry freight, and collision with a freight train is a possibility there.

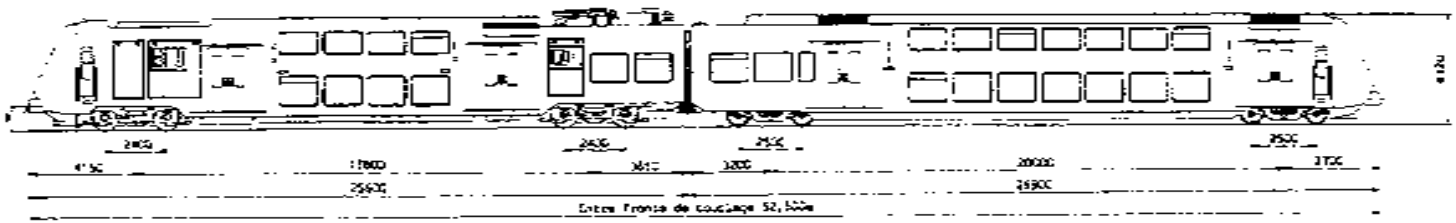
I'm sorry to take up your time with these speculations, but anyhow, thanks again for sending me the EIR. It's excellent, and I'm happy to have it.

Sincerely,

Thomas B. Stehlinger

ANNÉES DE CONSTRUCTION :
CONSTRUCTEURS :
NOMBRE D'ÉLÉMENTS CONST
NOMBRE D'ÉLÉMENTS À L'AX
TENSION NOMINALE :
PUISSANCE EN RÉGIME CONT
VITESSE MAXI EN SERVICE :
MASSE EN ORDRE DE MARCH
PANTOGRAPHES :
AMBIANCE CLIMATIQUE :
MOTEURS DE TRACTION
CARACTÉRISTIQUES :
TRANSMISSION MOTEUR-ESSI
CHAÎNE DE TRACTION CAIX À
COMPOSITION :
CAPACITÉ VOYAGEURS :

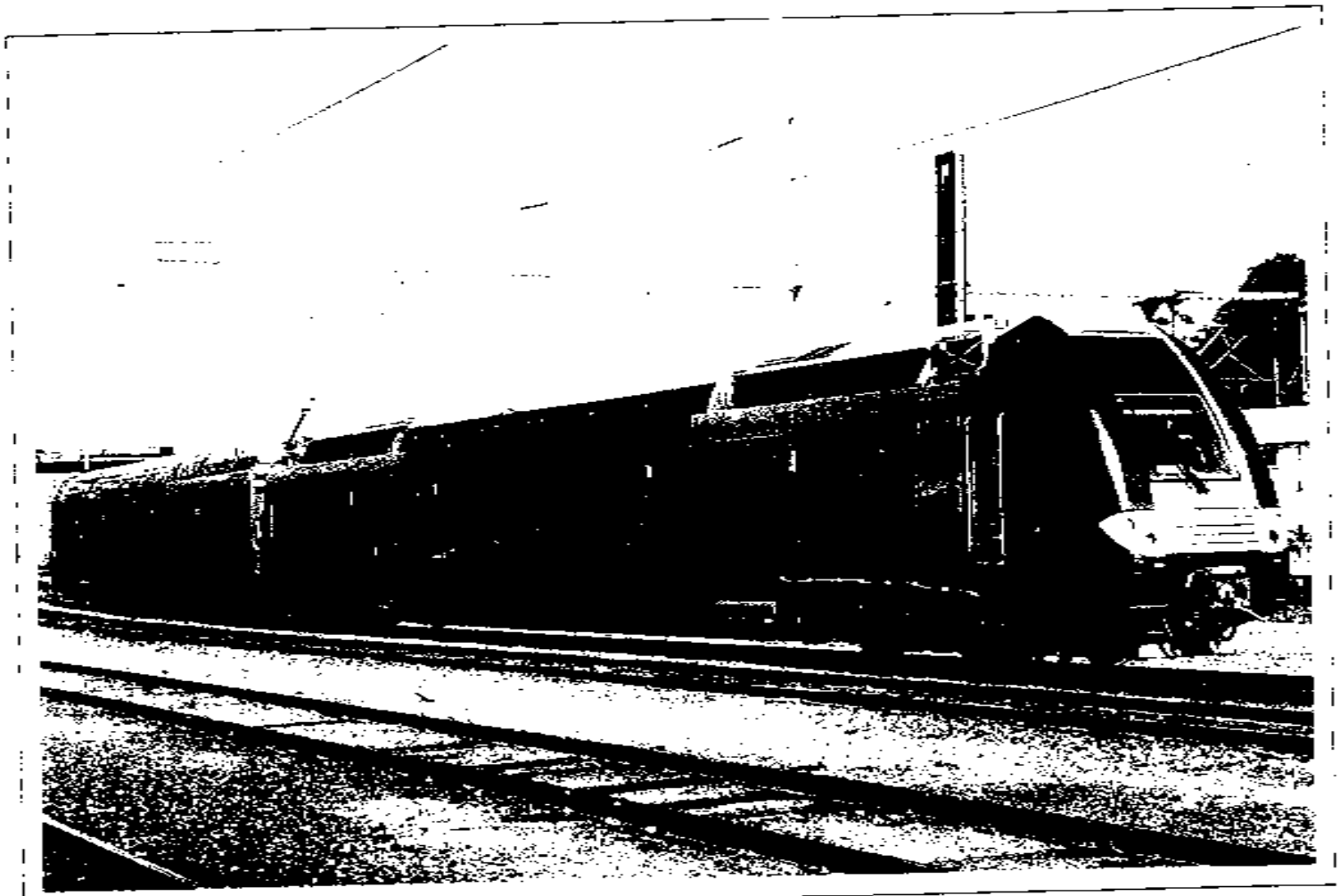
Z 23501 - 23580

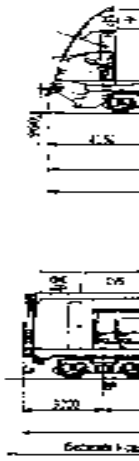


Largeur : 2 950 / 2 800

ANNÉES DE CONSTRUCTION :		CAPACITÉ EN CHARGE NORMALE :	
CONSTRUCTEURS :		DÉPÔTS D'ATTACHE :	
NOMBRE D'ÉLÉMENTS CONSTRUITS :		ATELIER DIRECTEUR :	
NOMBRE D'ÉLÉMENTS À L'INVENTAIRE :		MASSES :	
TENSION NOMINALE :			
PUISSANCE EN RÉGIME CONTINU :		DISPOSITIONS COMMUNES :	
VITESSE MAXI EN SERVICE :			
MASSE EN ORDRE DE MARCHE :			
PANTOGRAPHES :		FREINAGE :	
AMBIANCE CLIMATIQUE :			
MOTEURS DE TRACTION :			
CARACTÉRISTIQUES :			
TRANSMISSION MOTEUR-ESSIEUX :		PARTICULARITÉS :	
CHAÎNE DE TRACTION ONDULEUR IGBT :			
COMPOSITION :		ÉQUIPEMENTS :	
CAPACITÉ VOYAGEURS :			

	DE	DA-Ex
1re CLASSE		
2e CLASSE		



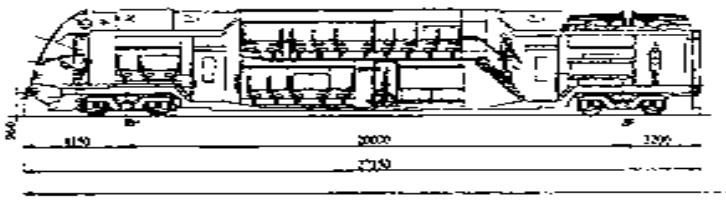


ANNÉES DE CONSTR
CONSTRUCTEURS :
NOMBRE D'ÉLÉMENT

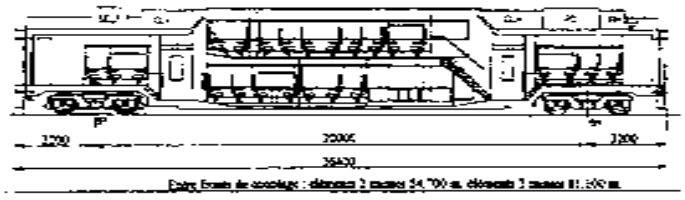
NOMBRE D'ÉLÉMENT
PUISSANCE :
TENSION NOMINALE
PUISSANCE EN RÉGI
VITESSE MAXI EN SE
PANTOGRAPHES :
AMBIANCE CLIMATIQ
MOTEURS DE TRACTI

ÉLÉMENT	
2 CLASSES	
3 CLASSES	
4 CLASSES	
4 CLASSES	

VOITURE Z 1 DE 2ème CLASSE
Éléments 2, 3, 4 ou 5 caisses

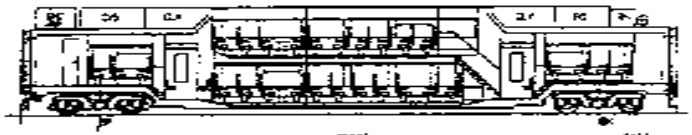


VOITURE Z 3 DE 1re/2e CLASSE
Éléments 2 et 5 caisses



Entre-Essieux de roulage : éléments 2 caisses 14,700 m, éléments 3 caisses 11,500 m

VOITURE Z 2 ET Z 2 2 DE 1re/2e CLASSE
Éléments 4 et 3 caisses



Éléments 4 caisses 17,500 m, éléments 3 caisses 13,900 m

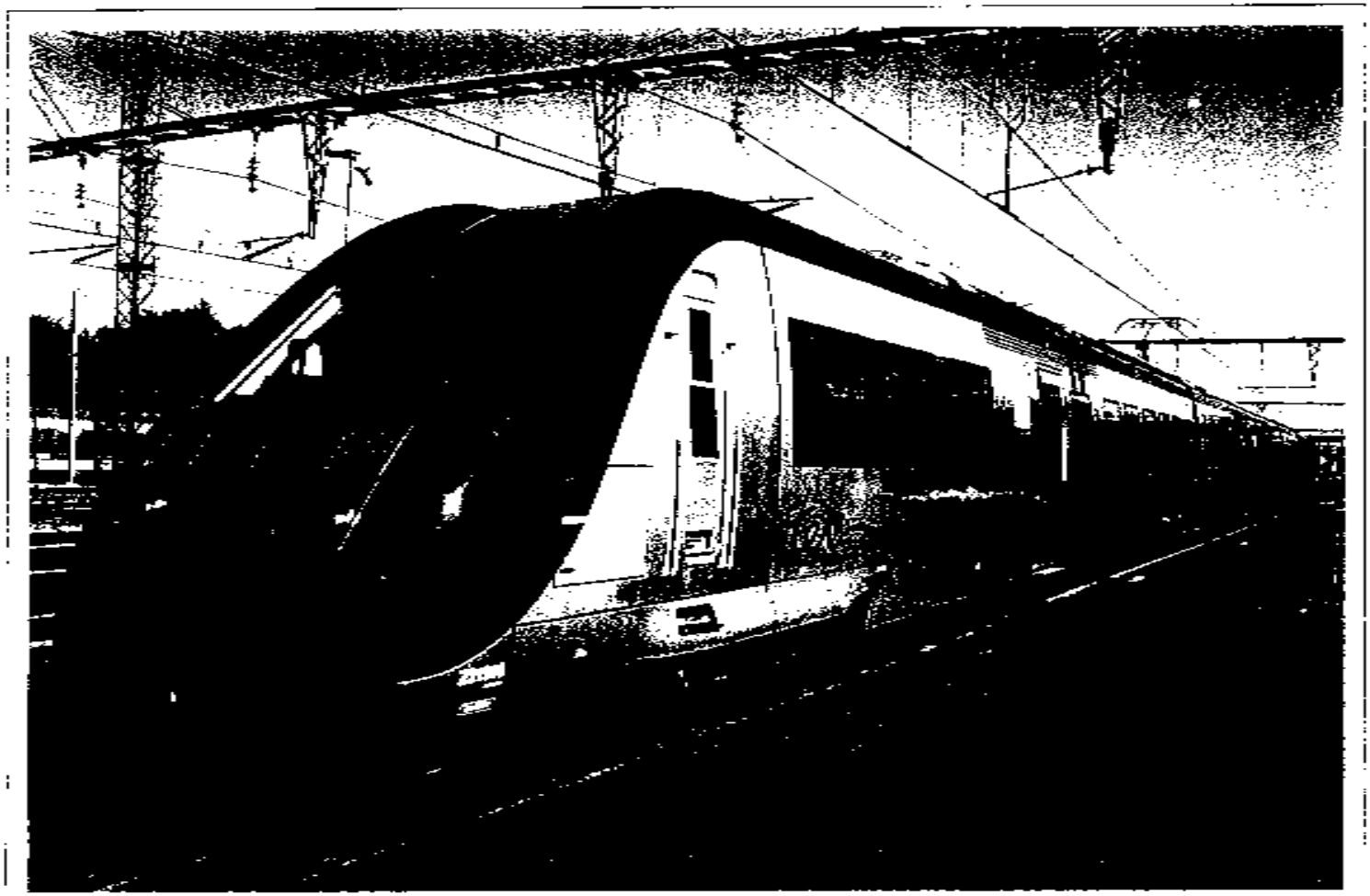
VOITURE Z 5 DE 1re/2e CLASSE
Éléments 2 et 3 caisses

ANNÉES DE CONSTRUCTION :	2001 - 2007
CONSTRUCTEURS :	CONSORTIUM ALSTOM/BOMBARDIER
NOMBRE D'ÉLÉMENTS EN CONSTRUCTION :	207 CAISSES RÉPARTIES EN 81 ÉLÉMENTS 1re CLASSE, 2 DANS [illegible] 1re ÉLÉMENTS QUADRICAISSES Z 26500, 37 ÉLÉMENTS EN 4 CAISSES DONT 1 ÉQUIPÉ [illegible]
NOMBRE D'ÉLÉMENTS À L'INVENTAIRE :	1 EN ESSAI
PUISSANCE :	RÉPARTIE EN TRACTION SUR BOGIE MOTEUR PAR 4 MOTEURS DE 300 kW PAR MOTEUR
TENSION NOMINALE :	1 500 V CC
PUISSANCE EN RÉGIME CONTINU :	1 200 kW PAR 3 MOTEURS EN SERVICE
VITESSE MAXI EN SERVICE :	160 km/h
PANTOGRAPHES :	1 AU DESSUS DE CHAQUE BOGIE MOTEUR
AMBIANCE CLIMATIQUE :	CLIMATISATION
MOTEURS DE TRACTION :	2 PAR BOGIE MOTEUR PAR 4 MOTEURS PAR [illegible]

ÉLÉMENT	COMPOSITION	PUISSANCE	MASSE	CAPACITÉ CHARGÉE*		
				1re CLASSE	2e CLASSE	TOTAL
2 CAISSES	Z1 + Z2	1 200 kW	180 T	67	139	206
3 CAISSES	Z1 + Z3 + Z2	1 800 kW	190 T	91	268	359
4 CAISSES	Z1 + Z3 + Z2 + Z1	2 400 kW	260 T	94	356	450
5 CAISSES	Z1 + Z3 + Z2 + Z3 + Z1	2 400 kW	310 T	86	502	588

* 4 PERSONNES/M²

CARACTÉRISTIQUES :	400 kW PAR MOTEUR
TRANSMISSION MOTEUR-ESSIEUX :	1 MOTORÉDUCTEUR PAR ESSIEU, SENS SPÉCIAL
ÉQUIPEMENT ÉLECTRIQUE DE TRACTION :	[illegible]
DÉPÔTS D'ATTACHE :	[illegible]
ATELIER DIRECTEUR :	[illegible]
DISPOSITIONS COMMUNES :	[illegible]
FREINAGE :	[illegible]
PARTICULARITÉS :	[illegible]
NIVEAU DU PLANCHER :	[illegible]
ÉQUIPEMENTS :	[illegible]

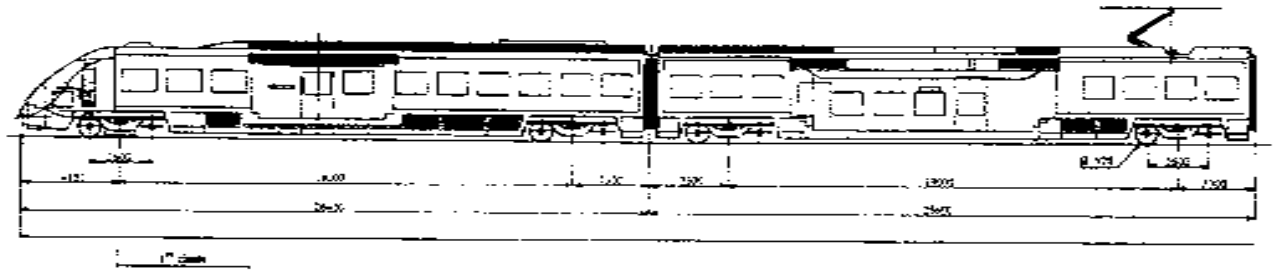


ANNEES DE CONSTRUCTION :
CONSTRUCTEURS :
NOMBRE D'ÉLÉMENTS EN COURS :
NOMBRE D'ENGINS À L'INVENTAIRE :
TENSION NOMINALE :
PUISSANCE EN RÉGIME CONTINU :
VITESSE MAXI EN SERVICE :
MASSE EN ORDRE DE MARCHE :
PANTOGRAPHES :
AMBIANCE CLIMATIQUE :
MOTEURS DE TRACTION (PAR MOTR

CARACTÉRISTIQUES :
TRANSMISSION MOTEUR-ESSIEUX :

CHAÎNE DE TRACTION :
COMPOSITION :
CAPACITÉ VOYAGEURS :
1 CLASSE :
2 CLASSE :
CAPACITÉ EN CHARGE NORMALE :

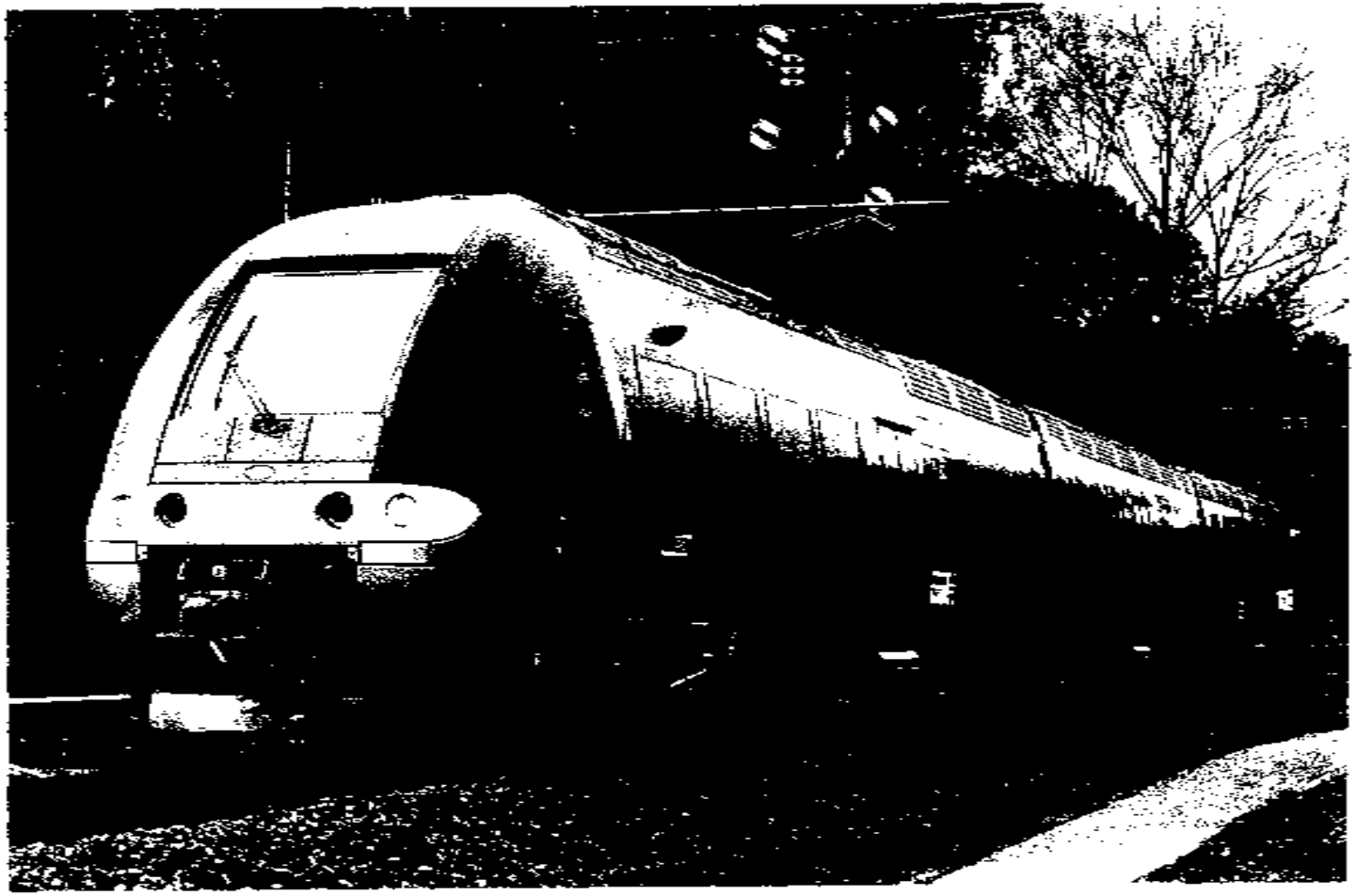
Z 21501 - 21614

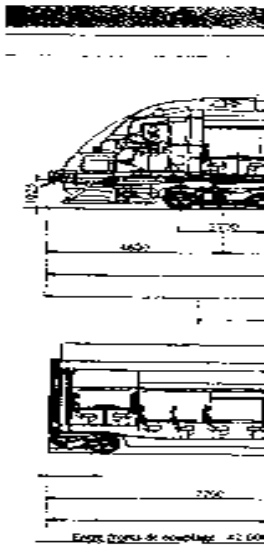


Largeur 2950

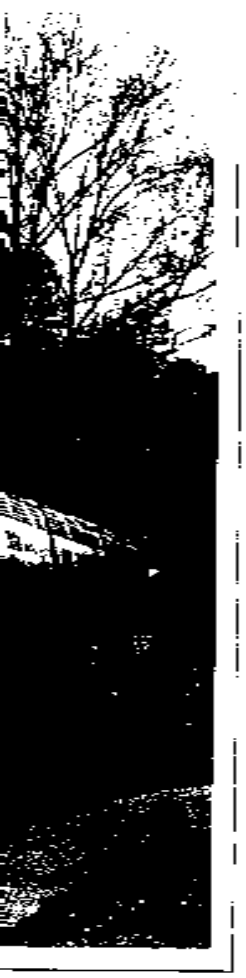
ANNÉES DE CONSTRUCTION :	2002 - 2004
CONSTRUCTEURS :	ALSTOM - BOMBARDIER
NOMBRE D'ÉLÉMENTS EN COURS DE CONSTRUCTION :	114
NOMBRE D'ENGINS À L'INVENTAIRE :	114
TENSION NOMINALE :	25 kV - 1500 V - 15 kV
PUISSANCE EN RÉGIME CONTINU :	4 400 kW
VITESSE MAXI EN SERVICE :	200 km/h
MASSE EN ORDRE DE MARCHE :	144 t
PANTOGRAPHES :	2 AV
AMBIANCE CLIMATIQUE :	CLIMATISÉE
MOTEURS DE TRACTION (PAR MOTRICE) :	4 MOTEURS ASYNCHRONES À CAGE TRIPHASÉS ALIMENTÉS PAR ONDULEURS À MODULATION DE LARGEUR D'IMPULSIONS
CARACTÉRISTIQUES :	550 kW - 2 000 tr/min - 2 POLES
TRANSMISSION MOTEUR-ESSIEUX :	ENTRAÎNEMENT PAR TRANSMISSION CARDANIQUE À CARDANS ÉLASTIQUES
CHAÎNE DE TRACTION :	CHAÎNE 1500 V - 25 kV MONOTENSION
DISPOSITION :	2 + 2
CAPACITÉ VOYAGEURS :	
1re CLASSE :	52
2e CLASSE :	66
CAPACITÉ EN CHARGE NORMALE :	118

	236 PLACES ASSISES DONT 4 PMR
DÉPÔTS D'ATTACHE :	EVE DE BRETAGNE (RENNES, TOURS)
ATELIER DIRECTEUR :	ETUP (TOURS)
DISPOSITIONS COMMUNES :	PRÉPARATION À LA SONORISATION EN LIAISON AVEC LA RÉSERVATION COUPLABLES EN UNITÉ ENTRE ELLES OU SOUS AUTRES ENGINS
FREINAGE :	FREINAGE ÉLECTRIQUE RHÉOSTATIQUE ET PAR RÉCUPÉRATION FREINAGE PNEUMATIQUE À 2 CISAILLES SUR ESSIEU MOTEUR ET À 3 CISAILLES SUR ESSIEU PORTEUR PATIN ÉLECTROMAGNÉTIQUE SUR 6 ESSIEUX MOTEURS
PARTICULARITÉS :	4 BOGIES MOTEURS - 2 BOGIES PORTEURS CONFORMATION DE L'ESSIEU MOTEUR À L'ESSIEU PORTEUR : 2 ROUES PORTEUR - 2 ROUES MOTEUR RÉPARTITION DE MASSE ADAPTÉE À LA RÉSISTANCE AUX CHOCS DISPOSITIF D'ARRÊT EN PRÉSENCE DE FEUX À AVIS RESTRICTIF UNE SEULE PORTE D'ACCÈS PAR FACE ET PAR CÔTÉ OUVERTE PENDANT L'ARRÊT
NIVEAU DU PLANCHER :	PLATE-FORME D'ACCÈS À LA MONTÉE DE 550 mm PLATE-FORME D'ACCÈS À LA DESCENTE DE 550 mm SALON : 1 200 mm
ÉQUIPEMENTS :	ESPACE PMR AVEC RABATTEMENT DE PLACES, ESPACE POUR POUSSETTE, ESPACE VÉLOS ET POUSSETTES DANS LA CAISSE À PROXIMITÉ DES PORTES D'ACCÈS, 1re CLASSE CLIMATISATION SECOURUE, CHASSE-NEIGE ET DÉVIDOIR CENTRAL

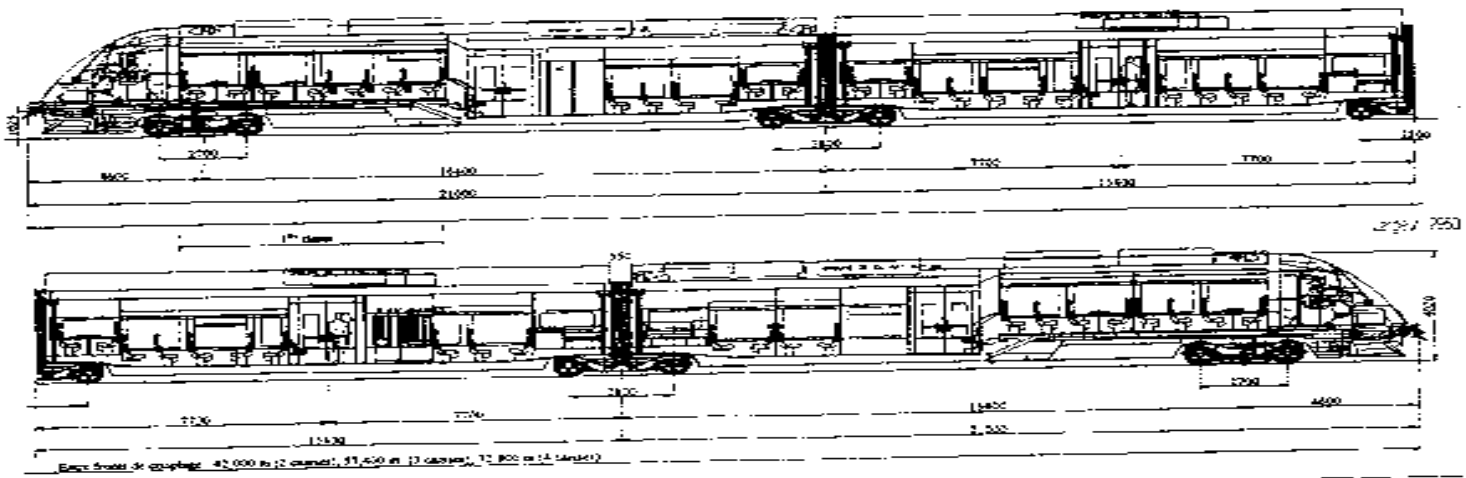




ANNÉES DE CONSTRUCTION :
CONSTRUCTEURS :
NOMBRE D ÉLÉMENTS EN CONSTRUCTI
DÉTAILLES COMMANDES
B MODE A 7550 S C A 5565
Diesel A 7550 S C A 5565
RECOURANT 2 A 7550 S C A 5565
NOMBRE D'ÉLÉMENTS À L'INVENTAIRE
PUISSANCE NOMINALE :
VITESSE MAXI EN SERVICE :
MASSE EN ORDRE DE MARCHE :
COMBUSTIBLE :
AMBIANCE CLIMATIQUE :
LANCEMENT DU DIESEL :
MOTEUR 4 TEMPS SURALIMENTÉ .
TYPES DE MOTEURS DIESEL 5:
CARACTÉRISTIQUES :
TYPES DE MOTEURS ÉLECTRIQUES:
TRANSMISSION MOTEUR-ESSIEUX :
ÉQUIPEMENT ÉLECTRIQUE :



X 75500 - X 76500 - Z 27500



ANNÉES DE CONSTRUCTION :	2003-2004
CONSTRUCTEURS :	BOMBARDIER TRANSPORT
NOMBRE D'ÉLÉMENTS EN CONSTRUCTION :	37 RAME DE FRANCE 3
DÉTAIL DES COMMANDES	
SIMPLE « TRAM »	3 CLASSES 44 1 CLASSE 21
DOUBLE « TRAM »	3 CLASSES 88
SIMPLE « TRAIN »	3 CLASSES 68 1 CLASSE 21
NOMBRE D'ÉLÉMENTS À L'INVENTAIRE :	18 EXEMPLAIRES
PUISSANCE NOMINALE :	VERSION ÉLECTRIQUE 1 500 KW
	VERSION DIESEL 1 470 KW
VITESSE MAXI EN SERVICE :	160 KM/H
MASSE EN ORDRE DE MARCHE :	3 MODULES 3 CLASSES 210 T
COMBUSTIBLE :	GAZOLE
AMBIANCE CLIMATIQUE :	CLIMATISATION
LANCEMENT DU DIESEL :	DÉMARRAGE
MOTEUR 4 TEMPS SURALIMENTÉ :	4 MOTEURS DIESEL MTU 8V 4000 R41
TYPES DE MOTEURS DIESELS :	2 MOTEURS DIESEL MTU 8V 4000 R41
CARACTÉRISTIQUES :	2 X 8 CYL. EN V À 90° PESANT 2 952 KG ET DÉVELOPPANT 1 470 KW
TYPES DE MOTEURS ÉLECTRIQUES :	PARALLÈLE 4 MOTEURS ASYNCHRONES DE 380 KW
TRANSMISSION MOTEURS-ESSIEUX :	CARDANS LATÉRALE
ÉQUIPEMENT ÉLECTRIQUE :	ALTERNATEUR TRIPHASÉ ASYNCHRONE VERSION DIESEL ET CONVERTISSEUR STATIQUE

CAPACITÉ VOYAGEURS :	1 CLASSE 153 À 174 PLACES ASSISES SUIVANT LES PRODUITS
	2 CLASSE 210 À 236 PLACES ASSISES SUIVANT LES PRODUITS
CAPACITÉ EN PLACES ASSISES PAR VOITURE :	VOITURE DE 1re CLASSE
	1re CLASSE 48 EN 2e CLASSE 68 EN 2e CLASSE 72
DÉPÔTS D'ATTACHE :	8 UM DE MASSY
ATELIER DIRECTEUR :	MASSY
DISPOSITIONS COMMUNES :	GUIDE DE DÉPANNAGE INFORMATISÉ (GDI) DANS ÉLÉMENTS MOTEURS ET 2 CLASSES
FREINAGE :	FREINAGE ÉLECTRIQUE RHÉOSTATIQUE ET PARÉCUPÉRATIF EN VERSION ÉLECTRIQUE
	FREIN PNEUMATIQUE À DISQUES FLASQUÉS SUR TOUTES LES ROUES
	FREIN ÉLECTROMAGNÉTIQUE EN FREINAGE D'URGENCE FREIN MAGNÉTIQUE
PARTICULARITÉS :	VERSIONS « GRAND CONFORT » AVEC TÉLÉVISEURS
	TRANSFORMATEUR À LA PLACE D'UN MOTEUR DIESEL EN VERSION ÉLECTRIQUE
	STRUCTURE OPTIMISÉE POUR LA RÉSISTANCE AU CHOC
	SUSPENSION PNEUMATIQUE - BOGIES PORTEURS MOTEURS ET PORTEURS
	1 PORTE D'ACCÈS PAR CAISSE OUVERTURE 1 300 MM
NIVEAU DU PLANCHER :	SALLE BASSE 580 MM
	SALLE HAUTE 1 200 MM
	SALLE SUPRÊME 1 130 MM
ÉQUIPEMENTS :	WC PMR PAR RAME 2 EMPLACEMENTS PORTE-VÉLOS PAR CAISSE À BAGAGES
	4 PLACES DE PRIORITÉ DONT 2 PLACES

Electrification

From: david_tambling@agilent.com
Sent: Wednesday, May 19, 2004 9:41 AM
To: Electrification
Subject: Impact of electrical trains on heritage trees

Hello:

I am writing to voice my extreme concern about the impact on Menlo Park and Atherton of the electrification proposal for Caltrain.

From a practical standpoint, going forward with this proposal would add years to any improvements and cost tens of millions of dollars (perhaps more) in legal fees, impact studies, eminent domain battles and property owner compensation. Destroying heritage trees and property values in one of the most expensive regions in the world is sure to ignite passions and guarantees a long and costly battle.

Philosophically, it is not right to destroy the natural beauty of these towns and kill hundreds of mature trees to save 3-4 minutes on people's commutes. With the new baby bullets Caltrain is already much faster than driving along 101; incremental improvements in speed are of little value to the community at this point.

Please reconsider this proposal before starting down a road of endless litigation that is sure to anger the entire Peninsula and ruin Caltrain's goodwill in the community.

Regards,

David Tambling
Menlo Park, CA

Electrification

From: Keith Vimoche [kpvhome@sbcglobal.net]

Sent: Thursday, May 13, 2004 9:49 AM

To: Electrification

Subject: Caltrain Electrification Program - Environmental Assessment/Draft Environmental Impact Report (EA/DEIR)

Dear Sirs and Madams,

I concur with the conclusions reached in the subject report and favor electrification.

I would however ask that the Caltrain adopt an objective of running trains underground as the primary objective in all future grade change considerations.

It seem to me that the focus of grade change is currently on how far above grade the trains will run or how far below grade a road must be built to accommodate grade separation.

I would like to see Caltrain construct all future grade separations by relocating trains underground and allowing road crossing to run at grade level. This would reduce all noise impact and provide a significant amount of new usable space for residential and retail development. I think that Caltrain could make enough money through the sale or leasing of the land and air space above ground to pay for such projects.

I'm interested to know if this has taken place anywhere in the system.

What is Caltrains position on underground relocation of trains at road crossings?

Has this taken place anywhere in the system and if so why isn't it done everywhere?

If this has never been done then I'm interested to understand why not?

Sincerely,

Keith Vimoche

63 Rebecca Lane
Atherton, CA 94027

650-322-1240 Home
650-722-1167 Cell
kpvhome@sbcglobal.net

Electrification

From: Martin Wasiak [mjw15@cornell.edu]

Sent: Monday, May 24, 2004 12:16 AM

To: Electrification

Subject: comments

In section 2.3.2.1, you mention that the catenary might have to be de-energized to allow freight operations. Why is that the case when the catenary is supposed to be outside the dynamic envelope of the vehicles? Do you envision freight trains to scrape the wire in certain locations?

I really like the look of European EMU's. Caltrain stainless steel look is very dated and rather unattractive, despite the pleasant interior. I would like to suggest that Caltrain strive hard to get EMU's running for electrification, or if that's not financially possible, repaint all cars to a more modern look.

-martin

Electrification

From: Oger76277@aol.com
Sent: Tuesday, May 25, 2004 12:06 PM
To: Electrification
Subject: tree removal

We are strongly opposed to electrification of Caltrain if it includes removal of numerous trees. The Almanac article states that 8-12 trees along the Palo Alto, Menlo Park border, 15-22 trees in Menlo Park, and 80 trees in Atherton would be removed for electrification. These trees are large contributors to the quality of life in these communities. They are not only visually pleasing, but also, act as a buffer to the increasingly noisy Caltrain trains.

If there is any way possible to achieve electrification underground as PG&E seems to be pursuing with its lines, then we would approve of this project.

Our concern is that removal of the trees and the addition of unsightly poles and wires will effect our life style and the value of our homes. This is too much to lose to improve a system that already is suffering from lack of ridership and other issues.

Ralph and Ann Whittaker
480 Claremont Way
Menlo Park, CA 94025

FRANCIS WONG
188 Bonny Street
Mountain View CA 94043-4410

e-mail: flwong@danceart.net

May 14, 2004

DUI_HT MAY24'04 en 3:03

Attn: Erik Olafsson, Senior Planner
Electrification EIR Comments
Peninsula Corridor Joint Powers Board
P.O. Box 3006
San Carlos CA 94070-1306

I have the following comments regarding the draft Electrification EIR.

Para 3.1.3, page 3-17. Visual impact of the OCS structures could be mitigated through use of "self protecting" oxidizing steel instead of galvanized steel. Also, judicious location of trees and shrubbery can further reduce the visual impact of the OCS poles.

Para 3.15.1, page 3-151. How is it proposed to separate the 600 volt dc electric trolley bus (ETB) wires and the OCS at the Common Street crossing, San Francisco? A grade separation is the only practical solution here.

Para 3.17.4, page 3-151. A 25Kv OCS imposes strong inductive currents on paralleling wires. Protection needs to be provided for equipment, vehicles, and workers on adjoining transit facilities. There are multiple 600 volt dc, 750 volt dc and 1000 volt dc power distribution systems that will be difficult to reroute: 7th St, Townsend St, Common St (Muni ETB), King St (Muni light rail), Bayshore station (Muni light rail), San Bruno to Milbrae (BART), Mountain View (VTA light rail), Tanien (VTA light rail).

Para 1.2.4, page 1-13. The declaration is made that electrification "speeding up acceleration and deceleration operations." Provide empirical elaboration on this claim. Such as: tables showing HP/ton required for certain acceleration or maximum speeds and comparisons of various rolling stock available in the preferred operating configurations. I.e. for a 500 seat train, five electric multiple units with total horsepower E and hp/ton of E/(5 x EMU weight) compared to ALP-46 and five trailers with horsepower L, and hp/ton of L/ (1 x engine weight + 5 x car weight).

Para 2.32.5, page 2-37. Also table 2.3.3. Due to higher costs for limited production and sole development and extended delivery time of locomotives for only Caltrain (ALP-46 type or equivalent), analysis should be made to using existing electric locomotives, waiting to order ALP-46 or similar as part of joint order with New Jersey Transit, CDOT, MARC, SEPTA, or combination of those other agencies using a 25 Kv system. Available 25Kv locomotives that have equal or greater horsepower ratings than the proposed locomotives include five CF6 EMD-ASEA units recently surplus from BC Rail, and 16 GE E60C units built for Mexico, 13 of which have never seen revenue service. Even after overhaul and conversion for passenger service, their nominal acquisition cost enables a significant savings over new locomotives (I estimate in excess

of $20 mil.) Life cycle costs might be increased due to using a 6 axle design, but there still is a significant savings of time and scarce capital funds. This also permits interim use of existing rolling stock and possible phased transition to EMU technology when costs of FRA compliant equipment can be shared, again with the eastern agencies, on a quantity order.

Francis Wong

Electrification

From: Jill & Steve Zanolli [zanolli@comcast.net]
Sent: Tuesday, May 25, 2004 10:15 PM
To: Electrification
Subject: Electrification of the trains

I wanted to comment that I am against the electrification of the trains. I am concerned that you are overlooking the impact to neighborhoods. The need to drastically trim trees as well as the general aesthetic affect on the community is unacceptable.

Jill Zanolli
650-838-9987

IX PUBLIC MEETING TRANSCRIPTS

Public Meeting to Review Draft Environmental Report
Caltrain Electrification Program
April 22, 2004

San Francisco, California

Meeting facilitator and other representatives:

Lou Hextor, MIG
Michael N. Lewis, Engineering Manager, Parsons
Pat Gelb, -Environmental Planning, Parsons

Speakers:

John Bacon

I see from your figures that you hope to gain about 4,000 new riders, cheapest option was $601 million, $24 million per electric locomotive is capital cost. On the website it says that the operating cost would be more operating electric versus diesel. Additional cost in maintaining catenary and this would outweigh the savings of operating electric locomotive. Greater reliability. In San Francisco we had a power outage a couple of years ago, and BART was shut down. Caltrain didn't shut down and used their engines to keep the terminal facility going. If you are standing waiting for a train, a late one is better than none. Just over 4,000 additional riders, which comes to $180,000/per new rider. Last point. Another alternative not discussed, if you could implement level boarding and shorten local trains from five to two cars. You should pick up 4 minutes per car lost. Level boarding is standard and people can come on quickly, gain 22 minutes, 12% of 90 minutes comes to…it would be less than 22 minutes for sure.

Call for questions:

Walt Scrasen:

I just want to mention about FRA compliant equipment. It's usually heavy and clumsy. Most European equipment is much lighter, but doesn't comply with FRA. Why can't you set up to have time separation so far as freight operations, use more efficient type of equipment?

Answer: Part of the problem is that we're operating on Union Pacific railroad track to Gilroy. They operate intense freight system. It would be difficult to create temporal separation. The other thing is the possibility of high speed rail system coming in.

William Robinson, FP International

I represent the mid-peninsula. Two or three things. I appreciate seeing pride in grade separations in Holly Street and San Carlos crossings. As contrast, I'm just 200 yards from grade crossing at Charleston Road in Palo Alto and shared by several schools. Biggest obstacle to our idealized plan is the money and timing this will take and more money and timing for grade separations where you want higher frequency and higher speed and you want safety. Keep those things in mind.

Question: Why are they (BART) so noisy? They do buzz. Is it because they have different motor system? Second, braking is not a quiet thing. So, Caltrain at the platform side is dangerous to the ears. Can they use electric circuit to reduce the noise?

Issue of scaling your system, personally I prefer a mix with EMUs -- lighter-weight vehicles and more of them. Addresses better frequency. If you scale the system power wise so you have a lot of tractions demanding power, so you don't have a brown out. Dropping voltages. FRA standards, in decade to do this, perhaps we can have a mandate to separate the timing of freight or elimination.

Answer: The reasons why electric is better at deceleration is because they use electric motor as generator. Generator uses motor as breaking element. Can't answer question about BART. One of the advantages of EMUs is because they are individually powered so you can get them in 2- or 3- car….You can couple them together married pair or triplet. 6-car or 2- or 3-car. Electric offers more flexibility in train length.

Another speaker:

Will it reduce noise on breaking for electric compared to diesel?

Noise… Compared to diesel at the present time?

Answer: Yes.

Public Meeting to Review Draft Environmental Document
Caltrain Electrification Program EA/EIR
Sunnyvale, California
April 24, 2004

Meeting Speakers

Jack Perry, S.C. Co. Transportation (retired), Sunnyvale Hearing Speaker, April 24, 2004

My question was what would be the difference in capital costs for rolling stock between the electric locomotive option and EMU train options? That was answered in the presentation.

But, I would like to ask an additional question "What would be the difference in the travel time between the two options. Would be significant the EMU would be faster than locomotive trains.

Is there any difference in travel time between using the electric locomotive and EMUs?

Brooks H. Lupien, Sunnyvale Hearing Speaker, April 24, 2004

How is electrification justified as to the expense to go as far as Gilroy when the traffic down there will be relatively light?

Electric versus locomotives has been answered.

Response: Answer will be in the final document.

Edward Holland, Sunnyvale Hearing Speaker, April 24, 2004

While you were talking about travel time, the thought comes to me that probably more important than travel time is the feeling that you get…gives customer the feeling that he is getting there faster, but isn't getting there any faster. That's a plus.

If we go ahead and do electrification, are there other transportation programs that we should be doing, but can't because of money going into that?

Response: Yes, there are.

Joan Holland, Sunnyvale Hearing Speaker, April 24, 2004

I was just curious about Caltrain Electrification Program in ticket sales. Who gives Caltrain money to run from day to day, the city, the county, the state, federal?…Extra funding.

Can we get people in the community up and down the peninsula who are well to do to volunteer or donate. There are many good projects. This is one of them.

Response: Our funding pays…45% comes from tickets, rental property. Three counties that make up…San Francisco, Santa Clara, San Mateo…they make the contributions. We may get for operating. Primarily comes from three counties. If you go to our website, financial

sheet with where the revenues comes from. We are presenting the budget for next year. It will show how we're funding Caltrain for year 2005.

Brian Wilfley, CAC, Sunnyvale Hearing Speaker, April 24, 2004

I notice from the board, EMU alternative provides for significantly less vibration as opposed to the other two? I am curious why that is. Does that then cause the EMU to be a preferred alternative?

…Whether vibrations are in the technical definition of significant…? My intuition says in Atherton there is vibration. If there is a large vibration reduction and why that would be, I am curious why that is. Therefore, does that allow that one to be elevated?

Response: We will respond to that in the technical document. None of the rolling stock options has severe vibration…There are no severe impacts on vibration on any of the options.

Response: There is significant difference between vibration and noise. What we are dealing with here is noise.…vibration travels through the ground…concern at symphony halls…electrification will minimize vibration. Significant reduction in noise. We will try to define…

Jim Stallman, Sunnyvale Hearing Speaker, April 24, 2004

This is kind of looking at rolling stock. That…then VTA was looking at new buses, they refused to look at future fuel availability and fuel costs. Needs to be embedded in the report. What happens at the end of the decade when oil gets scarce? Fuel costs and whether this is big factor. The implication of operating costs translates into service. Whether you stay with oil based or get off of it.

Roger Baird, Sunnyvale Hearing Speaker, April 24, 2004

Just a couple of quick questions about the actual megawatt load that you're requiring PGE to deliver?

Why weren't the two major locomotive suppliers in the U.S. being considered (GE & EMD)? Why weren't they considered as locomotive suppliers?

Response: The transformers are going to be between 30 kva and 60 kva and each transformer will support total load in the vicinity of transformers. Only have three transformers…150 megawatts, that will be peak load. We will give you specific information.

The reason GE and EMD, they don't produce electric locomotives any more. There are no electric locomotives produced in this country. There are lots of light rail being created. No high powered locomotives. There is big market in Europe, Australia, and Africa for electrics.

Response: Mike, I and team met with power suppliers PGE and Santa Clara, and other potential power suppliers in the Bay Area about the project. We have had contact with them over the last couple of years.

Yevgeniy Lysyy, Sunnyvale Hearing Speaker, April 24, 2004

In other countries…reduces operational cost…

The reason for Caltrain Electrification is to reduce noise and air pollution and to build more apartments next to railroad. But, as for me, I like to live in noisy place…In other countries…They built apartments for low-income people like me anyway and such affordable housing just living next to freeways, airports, railroads without electrification. If they want to get more money, they must risk money particularly with electrification. Why Bay Areans, all of California, and the United States must pay money for a few realtors with money. Let them pay themselves. By the way, noise of Caltrain is nothing compared with noise from freight train, they run all night and all day.

Another reason for Caltrain Electrification is to reduce…by 10 minutes…small locomotives instead of big one…6,000 horsepower. If there aren't special locomotives in U.S., buy from Russia. In Russia, locomotives are cheaper than passenger locomotives. In the case of Caltrain, electrification is just a waste of money. EMUs is a waste of money everywhere, but multiple unit…Rail car…small locomotives instead of big one. Such trains are several times more expensive and more maintenance and repair is expensive. They are faster but not twice as fast. In the city, we just bought EMUs…average speed is 32 mph, Caltrain is 28 mph. No big difference so what's the point.

In my opinion, do something useful. Drop this project. Let's do something useful. For instance, Caltrains must run every 15 minutes like BART trains do. Short trains every 15 minutes instead of half hour…no regular trains…light rail…San Jose to Cupertino…

Charles Guenze, Sunnyvale Hearing Speaker, April 24, 2004

In the preparatory remarks, mentioned other improvements that have been planned or contemplated, increasing grade separation and increasing the number of tracks, and there is long range possibility of high speed rail. Is there an attempt to coordinate the electrification program with these other very construction-intensive projects to both minimize the cost of project as well as the environmental problems of extended construction impacts?

Yuriko Kishimoto, Palo Alto City Council, Sunnyvale Hearing Speaker, April 24, 2004

First question was impacts of the operating cost going up or down? Second, whether there are potential safety impacts? I know stopping distance must go down but…

Cars number of accident and suicides. Third question is on the tree impact and estimate number of trees which have to come down, and whether Caltrain owns right-of-way to potentially replace the trees.

Response: Everything you have asked is answered in the EIR document. You can look online or get copy of CD. Look at Summary, Operating Costs. We had arborist enumerate all the trees hanging over the JPB envelope.

Margaret Okuzumi, Executive Director, Bay Rail Alliance, Sunnyvale Hearing Speaker, April 24, 2004

Executive Director of Bay Rail Alliance, our organization has been very strongly supportive of electrification and we would like to see this proceeding.

My question has to do with the cost estimates for the various EMU and locomotive options, because looking at EIR, maybe I missed it because the cost for just replacing the locomotives or getting EMUs, they look to be about the same, what EMU cost is based on, and are those FRA compliant. I have another question that is kind of related. Would it be possible to buy out UP freight operations…not having it running on the line. How much would that cost and maybe that would be worth doing, and you could save a couple of million on equipment.

Response: There is typo in the Executive Summary. Cost of just replacing electric locomotives in first 2008 is $145 million, to replace EMUs all stock is $374 million, quite a big difference. In looking at total for electrification, there was a typo $602 versus $630 million. Difference between $602 million and $830 million.

Response: That presupposes there will be FRA compliant vehicles.

Doug Rajiv, Sunnyvale Hearing Speaker, April 24, 2004

I've been a regular Caltrain commuter for the last four years commuting from Sunnyvale to…I have some reservations, the main thing is the connectivity between the Caltrain stations to city area or work area…employers and city transportation have buses…I've observed after office hours especially after 6 or 7, there is absolutely sometimes nothing to reach those stations, and that's one of the most important concerns people have is how are we going to reach the station, because due to economy, we have to work at least 12 to 14 hours a day. It's a great project, electrification, but raising ridership that's what everybody is looking at. Are you having plans of having more connections, especially between small stations where there is hardly any infrastructure there?

Doug Delong, Sunnyvale Hearing Speaker, April 24, 2004

Well, Margaret kind of touched on one issue that I was interested in. She was talking about could Caltrain buy out the UP trackage rights on the existing JPB right-of-way to eliminate freight traffic. I'm thinking about it the other way. Keeping the freight traffic here which produces significant revenue for Caltrain right now and growing the public ownership of right-of-way…Bay Area in general…California high speed rail initiative, they seem to be saying that they are going to make their own sandbox and play in it and keep stuff they don't want out. That seems like a fundamentally wrong way to do things. If you need extra tracks so that slow moving freight train moves through corridor while the passenger trains zips by at 200 miles per hour on another track, do that, and then you have redundancy to accommodate maintenance and other things, instead of having a system like BART that has only a minimum number of tracks. You can't have express service, you can't fix anything, and it's an operational disaster. So my question really is, if we are going to electrify to Gilroy, and Monterey Transit wants to extend Caltrain to Salinas...? Also, does it make sense to explore possibility of growing public ownership of the right-of-way as far as Gilroy, Salinas? Does it make sense to explore public ownership towards Newark, Altamont Pass, and Oakland? This would have benefit for UP of eliminating the maintenance expense if they didn't have such a disasterous agreement with Caltrain. It might free up some capital and the capital would…public sources, trackage rights might preserve this monopoly access…, but things like Caltrain and Dumbarton Rail and capital would continue to grow many parts of the line. There are more passenger trains than freights trains…peninsula, Gilroy, but have those trains to Great America Stations, so you could serve corridor with Gilroy train…of course, the issue

of electrification, you cannot resolve in this environmental process. Your environmental document is programmatic, thing isn't pinning down exact number of tracks…do you electrify all the way to Gilroy or stop at San Jose. This issue of rolling stock, what I like about Caltrain and JPB are they are doing it incrementally so you aren't biting the elephant in one bite.

Question (speaker unknown): Will electrification change or extend hours of train operation? Is this included in the project?

Answer: Operating hours is not covered in this project. Trains shut down at 1 a.m. to 4 a.m. We are running on new schedule as of June. Running up to 1 a.m. 3 to 4 hour gap. Open at 4:30 a.m. See proposed new schedule. Ridership is fair at those hours.

Public Meeting to Review Draft Environmental Document
Caltrain Electrification Program, Peninsula Corridor Joint Powers Board
Meeting minutes for April 28, 2004:
Morgan Hill, California

Pat Gelb: presented the results of environmental impact study and outline the steps for completing the environmental process.

Speaker Comments:

John Fallowfield
825 Oak Park Drive
Morgan Hill, CA 95037

John Fallowfield: Retired railroad person in Morgan Hill. Will construction of the project go all the way to Gilroy before service is started?

Answer: We may go to JPB second opionion to Gilroy we trying to get whole project cleared. (could not hear clearly)

Question: What is the life expectancy of current fleet of equipment as opposed to new equipment?

Answer: The gallery cars 15 years or probably less than that. The locomotives will be 10 years to …. rolling stock 30 years. So far the fleet has about 30 years and the rest less than 10 years.

Pat: JPB will reserve about five…

Public Meeting to Review Draft Environmental Document
Peninsula Corridor Joint Powers Board - Caltrain Electrification Program
May 1, 2004

San Mateo County Transit District Bldg.,
Caltrain Headquarters
1250 San Carlos Avenue
San Carlos, California

Meeting facilitator and other representatives: Michael N. Lewis (Parsons-facilitator), Lou Hextor (MIG), Pat Gelb (Parsons-Environmental Planning)

Approximately 65 community members attended the meeting.

Pat Gelb: Final environmental document will announce the preferred alternative and it will be out this fall so JPB can certify the EIR and FTA can sign the FONSI before the end of the year.

Lou Hextor : 15 Comment cards were turned in.

Speakers:

John Bacon
Adrian Brandt
Art Lindgren
Mark Duncan
Jim Kelly
Onnolee Trapp, League of Women Voters of San Mateo County (org)
Nick Perry
Beth Pierson
Doris Maez, Transportation Citizen's Advisory Committee (local agency)
Bob Olton
Marena Kaiser
Jack Ringham
Hank Lawrence
Jim Bigelow
Jeff Carter
Irv Dawid, Sierra Club and Advisory Council to BAAQD (org)
Gail Ghose
Francis Wong
Rosemary Maulbetsch
Steven Hamilton
Jennifer Keith
Paul Lund
Ernie Hills

Speaker Comments

John Bacon:

Having grown up in the Chicago area, I can really appreciate how rail technology can be effective, but not in this locale. I doubt if it is appropriate for this area. For example, cost effectiveness: $600 million including purchase of 25 new electric locomotives, which is seven times the cost of all new diesels. If additional 4,100 people riders using system every day, the capital cost is $180,000/person, per additional new rider. To put that in perspective, BART's highest estimate was $20 billion for 300,000 riders, which is $67,000 capital cost per rider. . . . In the 20s and 30s, electrification was able to save money, but that was compared to steam engines, not modern diesels. With modern diesel engines, it's not appropriate to go to electrification.

. . .If you are anxious to improve service, especially on local trains in the middle of the day, you have less than 200 people and you have capacity for 600 people. Just cut two cars and you can speed up service by about the same amount as electrification. Pulling 5-car trains—and there was a consultant that came in here and showed— you save 4 minutes on the route for each car you knock off the trains, that would speed up the service. Just run shorter trains. Another issue is your long-range projections in the environmental document for the Transbay Terminal, you tend to increase the number of trains faster than the number of people who ride the trains. It's a good idea to increase service, but it looks like you would be well-served to run no more than 5-car trains. Level boarding will double the speed of boarding instead of stairs. This is industry standard to speed up boarding. Uncertainty of wheelchair people. With the bullet trains, you need to time the trains to meet each other and this is not effective for wheelchairs.

Adrian Brandt:

I definitely support the project, but as far as the environmental report, I didn't see any mention of interior diesel fume levels. Presently interior diesel fume levels are high, passengers are bothered by locomotive especially in cars at the front of the train, especially when train is passing through the four tunnels, in the envelope of the tunnel or tube, the air quality inside the train is really bad. Visible smoke. I already checked with BAAQMD and nobody knows who has jurisdiction—is it EPA?. Air quality on certain Caltrain cars is entirely unacceptable and runs a health hazard. I would like to see that in the environmental document.

Art Lindgren:

It might be said, high cost of electrification trains, however, today's prices are tomorrow's bargains. A good example is the building of Bay Bridges. In 1936, it was really expensive to build all those bridges. The cost looked high, but ten years from now, to replace all that would be a whole lot more. And there's the benefit of electrification because of clear air. Just the other day it said in the paper, the air pollution in Bay Area is getting really bad, reaching high levels. With electrification, this alone would be worth it. And if traffic worsens in another ten years—and you haven't seen anything yet, if we continue to build more and more, transportation will be at a stand-still if we don't do something about it.

Mark Duncan:

Currently, Caltrain uses 71,000 gallons of diesel fuel every month and gets half a mile per gallon.

. . . In the EIR you need to quantify the precise amount of pollution that is being emitted. If you reported the quantities that are being emitted, the actual level of nitrous oxides, and considered

the overall effect on the Bay Area Air Basin, I believe it is quite significant and that would make a better case for electrification.

Jim Kelly:

I would like, first of all, much greater public educational effort is required on this issue. For example, in local newspapers in past week, they had a story about electrification and illustrated it with two vehicles that they said Caltrain that will be running. One of our local newspapers sent photographers to Mt View and they took picture of two light rail vehicles as Caltrain. I have not seen correction of that error.

. . . The main point is the health benefits of electrification. Please make no mistake, the motivation to move in that direction is much stronger than some people realize. We have on going in the U.S. and in Calfornia an epidemic of asthma. Two main causes of asthma are diesel fumes and automotive pollution, both of which would be reduced in this project. Because I am actively going to schools and talking to kids about health issues, in an average class of 30 kids, I usually ask how many of you are asthmatic and I usually get not less than five hands raised. When you consider the disease continues on the increase, so if you are weighing the pluses and minuses of the cost of diesel propulsion, that has a health cost. The cost of maintaining diesel propulsion— it's a scary number that the disease continues on the increase. So if you are weighing the pluses and minuses, please understand the cost of maintaining as a result of those fumes.

Onnolee Trapp:

I am representing the League of Women Voters of San Mateo County and we have about 600 members and we have a lot to say. Biggest advantages of electrification would be the reduction of energy use and auto pollution. The calculations, if accurate, are impressive compared to the no-build project.

. . .We recognize this is only one document among several currently circulating. The Transbay Terminal EIR and the Caltrain Strategic Plan were released recently. The Transbay Terminal EIR discusses duel-mode locomotives which was not discussed in this EIR document. We are wondering why because Caltrain Electrification Strategic Plan says that funding for electrification will not be available until 2014 and you are talking about 2008. Something is not coordinated here. This throws into question all of the tables that project 2008 level of service and costs. You need to do update of the tables, especially as it appears that you were using the same Parsons source for the tables. Fleet requirements for 98 and 132 trains. The Caltrain Strategic Plan says 100 trains. . . . We are very concerned about your figures in the increase in the number of passengers of 4,118 and the reduction of only 2 to 4 minutes of travel time where the Transbay Terminal EIR report says 14 to 15 minutes possible, and so we have just got to get everything on the same page here. . . .Improve end to end train running time beyond mere eight minutes.

. . . There are tables that talk about the numbers of locomotives and passenger cars needed, however, nothing in those tables speaks to no project: would you never have to buy new locomotives and passengers cars?

. . . We need responsible cost benefit analysis. We need to weigh the benefits of reduced energy consumption and air quality against the very small ridership gains and very small decreases in travel time savings. We need more thorough analysis and coordination and reconciliation with the Transbay Terminal EIR and Caltrain Strategic Plan. The benefits of electrification must be substantial, clearly defined and permanent. The Final EIR must convincingly demonstrate that the enormous monetary cost will be justified by benefits to passengers, neighborhoods,

businesses, economy, and is compatible with other regional transit systems and provide modern types of transportation.

. . . At the September 2000 scoping meeting, it was requested to include consideration BART as an alternative electric service. There is indirect reference to BART-type of operation in this EIR, third rail as one of the alternatives considered and withdrawn, however, you did not respond to the scoping meeting request to evaluate BART as an alternative. This is a short coming of this document. Primary purpose in this document is that we modernize Caltrain. This comes across as an image issue and not a technology issue.

. . . The EIR states that the electrification facilities would be designed to accommodate high speed rail service, but the supporting pages do not clarify if additional facilities and systems would be needed, would a separate track system be required to accommodate high speed rail and what part of electrification would not be required if high speed rail is not done. We are not so sure about the future of high speed rail in the State legislature right now. Has there been study of diesel locomotives on a completely separated right of way, with all cross streets either separated or blocked? You might get faster service this way if there were not cross traffic, and if high-speed rail is a realistic major planning consideration, there needs to be consideration of grade separation as a first step, with electrification to follow when we know what the high speed rail requirements are and what funding will come with it that might be used for non-rolling stock improvements. In the meantime, we might improve end-to-end running times by more than the 8 minutes reported.

Nick Perry:

I am in full support of Caltrain Electrified. I live near the rail line in Palo Alto within less than a mile away. So it has a good impact and I like to take train a lot. I'm supportive because of economic and resource issues. I heard that petroleum will run out in ten years. This affects not only diesel locomotives but also airplanes and anything that runs on fuel. We will ultimately depend on electrification of Caltrain. This will set the stage for high speed rail in the future. If petroleum does run out, we will have to depend on electric railways for long distance transportation in Bay Area and Calfornia and the rest of country. I am in full support and I hope this plans goes through.

Beth Pierson:

I just wanted to respond to page S-10 of draft report. The summary of long-term impacts and proposed mitigation measures where it says. "…the changes would not introduce elements that would be out of character with existing land uses or obscure a scenic view or vista." I speak as both a Caltrain rider for a number of years and a neighbor of Caltrain for a number of years, that the pictures that are shown in the report would obstruct the views from the ground from where I live, especially San Carlos. This is substantially true for the over grade separation areas where the wires would be raised above surrounding community. Also, in a number of communities especially San Carlos, but also I'm thinking of San Mateo and Burlingame, the train station is really a centerpiece for the downtown, it's kind of a gateway to the downtown and surrounding community and the visual impact of these wires should not be minimized, especially when you're looking at the centerpiece of downtown. And one last issue that is not addressed in the report, is not only the views from the surrounding areas but also the views for riders and users of the trains, both from the stations themselves and as you're arriving on the train and looking out the windows, we get great views, it's really a very pleasant ride, and I would not like to see that diminished. In summary, we presently have, the stations are a very user-friendly and welcoming environment; it draws people from the surrounding areas and works to draw people from the

trains into the downtown areas and I think that would be substantially impacted in a negative way by the kinds of illustrations that are shown in the report.

Doris Maez:

I'm on the San Mateo Transportation Authority Citizens Advisory Committee, so I've been following this pretty closely. In many ways, my comments echo those of Onnolee Trapp, I guess we think along same lines. I'm particularly concerned about the inconsistencies in Transbay Terminal EIR and this one and the Caltrain Strategic Plan: ridership, travel times, funding sources, time frames, level of service, all of those things are inconsistent; there are probably more. Those are ones that I've found. I'm submitting more specifics in written comments.

. . .I'm concerned about the costs versus the benefits. It is a high cost; there's no doubt about that. . . .There is increased o & m costs to maintain the overhead lines even though you have a reduction in energy cost that's more than overcome by the energy cost reduction. It will also take some signal system replacement; I was surprised to hear about that.

. . .In the air quality reductions that are stated, even in the report it says using liquefied natural gas was simply not considered because it didn't electrify the train; I think that's a very weak argument. . . . .I really was concerned that alternative fuel was not considered and also dual use locomotives that Onnolee suggested were not looked at.

. .Yes, there's some noise reduction, but the major impact of noise is really the train bells and the lack of grade separations drives that; you don't need to have them in every segment, but in heavily traveled sectors you do, there's also a safety factor. If high-speed rail is in our future we need to look at that grade sep issue now, not down the line.

. . .And also in your pictures over here, in the San Bruno Station location, and I'm on the Grade Separation Citizen's Committee, and there is a grade sep plan and the picture won't look anything like what's there. It's very misleading. The profile will be much higher than it shows. That picture shouldn't be used; it should be gotten rid of.

. . .There's a whole lot of differences in terms of funding short falls. There's a whole lot of differences and you should take care of them. Finally, the funding issue depends on reauthorization of Measure A and no where is that said .

. . .And the lady that talked about construction phase, construction impacts: The EIR does say that there will be disruptions in service and Caltrain riders have experienced no weekend service and we don't want another repeat of that. I don't think it made a good argument for electrification.

Bob Olton:

I'm a regular Caltrain rider representing not only myself but a bunch of other riders and I hope you will listen to what your customers who are currently using your system. People I talk to are opposed to this electrification for two major reasons. One of these is cost-benefit analysis. This is a huge expenditure and we question your projection of increased ridership from electrification. It might go up a little bit but because of increased service, you're running more trains, electrification has nothing to do with it. Do you know of anybody who says, 'I don't ride the train now, but I would if you electrified it?' Let's get real. This would do absolutely nothing to increase ridership. Second, from your chart, there is a huge potential non-project possibility here which is to take that gigantic amount of money and use it instead for something that would have a huge increase on ridership and would improve the environment and that is to take that money and use it to extend Caltrain into the Transbay Terminal in San Francisco and I know that's coming under other impacts and environmental reports but that's the thing that all us riders

really want and that really would have a dramatic increase on ridership and would give you more bang for your buck, whereas electrification itself does almost none of those things. Thirdly, it's ugly, like some of the people were saying here. I happen to live in Belmont, we just spent millions of dollars to make the Caltrain station the centerpiece of our downtown, and part of those millions have been to put all the wires underground. Now we're going to put them all up again? Come on! And don't give us an ugly-looking thing, which the voters are going to look at and say, you know, these people spent half a billion dollars, to create ugliness up and down the Peninsula, under a program that does nothing to increase ridership, and this is just not something we can justify when the things you could use this money for, which would not increase ugliness, would improve the environment, and would dramatically improve ridership, would be to extend Caltrain into the Transbay Terminal; let's use the money for that. And by the way, electrification is not necessary to extend Caltrain into San Francisco, yeah, you'd have to electrify the last couple of miles, but you wouldn't have to electrify the entire thing. OK. Please do what your riders want. We are your constituents and we want to help you succeed. We feel this project is a waste of money and the way to spend it is to extend Caltrain into the Transbay Terminal.

Marena Kaiser:

Thanks to Bob, Beth and John.

Are they not working to make diesel engines that are less polluting? Is that any serious option that has been discussed? Also, you have declining ridership, and you're always talking about increasing trains per day, what gives? And does the money mentioned include a new storage and maintenance facility for the electric trains or is this another added expense? And no mention has been made of the damage effect on people of 100 mph and higher trains so close to homes and businesses. Of course, I'm very concerned about the negative impact of high voltage wires. And another thing I'd like to ask is what is the connection between Caltrain and the California High Speed Rail project, because all that I have read in the past, the California project is to be an all new rail line totally separate from anything else. All grade separated for 100 mph trains, from what I read, LA to Sacramento. How is this to be compatible with Caltrain? We can never 100% grade separate. So, what is this all about?

It seems to me that Caltrain or your goal, is evolving to make Caltrain into a two-tier system in a sense of trying to please everyone. First, a stop at every station and second, a stop at every once in a while station. It might be the danger in all of this is that you could end up not serving anyone adequately and you will lose more customers.

Jack Ringham:

It seems to me that the EIR gives very little consideration to the relationship between electrification and the high-speed rail system other than to say that the two should be compatible. If HSR is going to be implemented, electrification should either be a part of it or come after it so we are not putting up overhead wires and then tearing them down for HSR. If it comes as part of high speed rail or after it, when we have segregated grade crossings, seems to me then there is reason to reconsider a third rail system rather than overhead wires. If there are no grade-level crossings on the system, why can't we have a third rail system like BART and eliminate the ugly, overhead wires? Also, one of the reasons you mentioned overhead wires was it would be compatible with high speed rail systems where you probably would not have grade crossings in rural areas. But I think you can have electric locomotives that were equipped to take their power from either overhead lines or the third rail, so that the high speed rail system could have dual purpose locomotives and Caltrain could have all third rail service.

. . . Also, I thought that the EIR greatly minimized the visual impacts that would be perceived and I feel that most people that live along the corridor would not agree that there is no visual impact. I think the visual impacts are very significant.

Hank Lawrence:

One of the things that kind of bothers me is that right now you only have one track going to Gilroy. I live in Menlo Park and it would be kind of nice to the people that do live in Gilroy down there to be able to have service going both ways in the morning and evening, so I don't know what has to be done with the Union Pacific Railroad, or whatever railroad runs that, but it's real important to get two rails down there. The other thing is that if you want to go into downtown San Francisco and the transbay, the only way to do it is through electrification, you can't have people, you can't switch mode of locomotive for the last mile, you've got to have electrification, BART did two things really right—they did a lot of things wrong: they had non-standard gauge rail and they had an antiquated control system— but they two things that really impressed me: one is they did the third rail, they had grade separation all the way, which made it possible to do that, and the other thing they did is that all the platforms were level with the entrance to the cars, those are the two features I really like. But believe me, I think it's really important to get that third rail, but in order to do that we have to get grade separations all the way through there. It's really important that we do that, but in the meantime, just use diesel, until we get complete, 100% grade separation and go with the third rail solution, it will be a wonderful thing to have. .The bullet trains are great, and I would like to see the bullet trains go down, after you get the second track, to have the bullet trains going down all the way to Gilroy, on a daily basis. I kind of like to travel to the outlets. I don't like driving 45 minutes in my car. If I could get on the bullet train and maybe stop in Mountain View and Tamien [unintelligible] I could get there in less time.

…Ridership right now is based upon, in my opinion, if it's going to take me longer, I'm not going to do it. If it's going to require too many changes, I'm not going to do it. If you can make the trains really convenient, I mean, I think your estimates of increase in ridership are really very understated. What you're doing, you're looking at everything like sort of ceterus parebus conditions; nothing else is changing, but if you can make the train more enticing by having faster times, which I think the bullet trains will really increase ridership dramatically. I think that would be a really good thing, if you could do that, I think you would have a much greater increase in your ridership than you anticipated.

Jim Bigelow:

I'm Jim Bigelow of Redwood City/San Mateo County Chamber and Menlo Chamber. Looking at this from the employee perspective of people commuting, this electrification process needs to go forward. The Transbay Terminal is only possible with electrification going underground. If you take all the grade separations from here to Gilroy, at $20 million apiece, you're going to spend way more money doing grade separations before you even get around to electrification, so one of the problems is the lack of money and the overhead wires tend to be a solution because you can't grade separate everything, and high speed rail is a decade off at the earliest, which is more money.

. . .I think the figures in the EIR for ridership which is 4,200 new riders, I think you can do a lot better than that. If employees can see an exciting, electrified, quicker service, I think that will be a benefit and you will get more ridership. . . .It's getting late and I need to shut it off. But I agree with Onnolee that ridership is too low. You can do better than 4,200 if you get this thing rolling and have the right appearance.

. . . For residents that live along the train line at the JPB meetings, they beat them to death about the noise, and if you are going to increase service and have trains 50-100 feet right from the rail, you need to get rid of the diesel sounds, you need to quiet it down, because you're going to have an ever increasing footprint for years without electrification. Overhead wires— I go to the east, I don't hear a lot of this in the east, after they put the catenary wire system up—I think the main thing for residents is the quieting down. You need to get rid of the gallery cars and go with the roll on and roll off like BART.

Jeff Carter:

I strongly support the program. There's still a lot more that needs to be done in the EIR but right now, I support it. Modern railroads around the world are electric. You go to Europe and everything's electric; the northeast corridor, that's electric. The performance of electric railroad over diesel-hauled railroad is – something that doesn't get built much any more because it's so much better. Acceleration and decleration is a lot better compared to diesel and it speeds up the service. I think it would speed up the service more than the phase-in of the [unintelligible] in the current program. For instance, the Baby Bullet, they speed up the train by cutting stations and it leads to a loss of ridership. However, with electric service, you can speed up the service and serve more stations. My own calculation is that you can reduce the time between Millbrae and San Francisco by five minutes. That's only 14 miles so that's more significant than some people might think. I think electrification is the way to go. The cost, a lot of people are concerned about the cost, $600-$800 million, but that's a bargain compared to spending $4 to $5 billion to put BART down there. We spent $1.5 billion to take BART to the airport and we all know what a disaster that turned out to be. BART should just stop where it's at and money for BART should be used to improve BART itself. Electrification is the answer and get more answers for people's concerns. I think it would be a modern railroad and you want to get people out of their cars and this is a good way to do it.

. . .I also question and think the ridership figures with what you can do with electrification, I think the ridership increases could be a lot more significant than what is stated in the EIR. Thank you.

Irv Dawid:

Thank you for holding this hearing on a Saturday—when Caltrain's not running, but Samtrans buses are. I'm speaking right now on behalf of the Sierra Club and I also serve but I'm not speaking on behalf of, the Advisory Council to BAAQMD. First I had a question for Pat, she indicated that the one pollutant that didn't see great decreases was nitric oxide and I wanted to see something to address that because I would think that would be one of the biggest decreases with electrification. In terms of the Sierra Club's perspective—we view this as actually our highest transportation priority— the biggest benefit to this project is not actually for people that are using the train but one of the goals that was mentioned at the beginning of the program and that is to be a good neighbor. In many ways, Caltrain is like having a neighbor who's got a smoking 1970s jalopy next door. And you're this person's neighbor and you're saying, 'When is that person getting a modern hybrid?" They don't have to get a zero emissions vehicle; you'll settle for a hybrid. The idea of electrifying Caltrain, it is perhaps suitable that we're holding this meeting the same year that the New York subway is undergoing its centennial. That's an electrified system even though the first subway in the world was not electrified. So, it is high time we brought this train even into 20th century, though obviously we are past that now. I'll end there; we're hoping to put in our comments, but this is an overdue project.

Gail Ghose:

I have couple of questions, real short. Pat, since this is projected to be completed far in the future, is there any possibility that hybrid technology could be built into the locomotives, one; two is there any consideration being given to retrofitting existing locomotives?

. . . And the second question is, how does additional use of electricity impact the power plants in California, would this require an extra power plant, for example, and would that be built?

Francis Wong:

Good morning and thanks again for having an accessible Saturday hearing. Two areas of comment: one is on the interaction between VTA electrification in Mountain View and Caltrain -Tamien station. That's a 750-volt DC trolley and it will be, in both locations, parallel to our proposed 25kV trolley and I expect there will be inductive forces exerted on the VTA and the impact and mitigation was not addressed in the document and that may pose a severe technical problem.

. . .With regard to electrification overall, I would like to see more, make the case stronger for electrification as far as faster braking and faster acceleration. That seems to be a basic problem of physics, you have more horsepower per ton, you're going to accelerate faster, and deceleration is unfortunately a basic problem with the human anatomy, that can only take so much deceleration before the coffee spills out of your coffee cup or you experience physical discomfort, so if you can show kind of by comparison with the state of the art with diesel and gas turbine acceleration and deceleration rates, and why that can or cannot be achieved with electrified equipment. The replacement of equipment, I think you need to provide in those tables that the net costs are probably understated for a complete fleet replacement due to the current FTA content of our existing equipment, and the net savings that are factored into your total costs are probably not correct. Also, I suggest, that you look at availability of current electric locomotives that are not in service for pre-qualification of the catenary construction and also short-term life cycle costs. The acquisition of a small order of electric locomotives to replace our diesels, we would be the only carrier in that contract. By acquiring existing locomotives at a mere fraction of the—and we're talking orders of magniture—you can get a gently used electric locomotive for $20 to $50 thousand plus some refurbishment cost against the $2 to $3 million for a new locomotive, and await a larger joint purchase contract with our other electrified properties, New Jersey Transit or Connecticut Department of Transportation—take advantage of the economic order quantities, patch on to those orders in the near term, and the life cycle costs for fleet replacement would be quite reduced.

Rosemary Maulbetsch:

1) Remind people that the Caltrain corridor passes through residential, business, and industrial areas but the environmental report has to generalize in summary. Each citizen needs to evaluate the effects on his own area.
2) . . .The report minimizes the visual effects dramatically in Atherton – regarding OCS and trimming and removal of trees.

3) . . . I'd be interested in knowing what hard data suggests the need for increase in the number of trains.

Steven Hamilton:

I'm a Burlingame resident, and I apologize if I sound parochial but I do want to pick up on a point that Beth raised earlier, and that is visual impact. The Burlingame Avenue Station is a visual anchor of Burlingame, of the Burlingame Avenue area. I was unable to find any visual

simulation of what the OCS system would look like in Burlingame and I would like to echo the point that Beth raised that the visual impact is very important for those stations that are, in fact, most of the stations that are on this right-of-way, to have a visual simulation of the OCS and I would like you to do that, certainly for Burlingame but also for the other stations that are visually important.

Jennifer Keith:

I want to ask a real quick question before I begin my comment, which is when do you expect the electrification project will be constructed. A: Within this decade.

Well I'm in support of whatever you have to do to get electrification approved as soon as possible. I live 20 feet from Caltrain in San Mateo—I mean, seriously, it runs right past my bedroom window and I've noticed, since I'm relatively new to the Peninsula community, I came here from Oakland, I've noticed when I was moving to the Peninsula that the vast majority of low income communities are all centered around the freeway or along the Caltrain corridor and that was actually what made it possible for me to get a place was because of the relatively lower cost because of the environmental impact on health and noise; these are more important than visual impacts. I was talking to my partner the other day he was studying in one of our rooms and he could see the smoke from the diesel as it passes by, so the impact on neighborhoods is not to be diminished in any way whatsoever in comparison to visual impact— frankly, I don't think that it looks all that ugly, and also that there should be some consideration about the fact that where the diesels runs now they effect at a much higher rate our low-income and usually our communities of color rather than the much higher income white communities who are able to locate themselves much farther, a mile away from the trains or up in the hills. That's a real significant, community sociological issue that should not be lost in this decision about whether or not to electrify Caltrain goes along with a lot of consideration about environmental racism and the impact on people who have to live along these corridors because of the unaffordability of the community that we live in. I am fully in support of electrification. I'd like to see it happen as soon as possible.

Paul Lund:

I'm strongly in support of electrification. I have three brief points to make. The first is a question: has it been considered to phase in electrification to Gilroy and to put in the overhead contact wires only as far as Tamien and to run diesel trains to Gilroy, as the number of riders there is miniscule compared with anywhere else on the system. When the Dumbarton Rail comes on line, it's likely to have far greater ridership per mile and the cost-effectiveness of electrifying that would be far greater than Tamien to Gilroy, and yet, that's supposed to be diesel. Anyway, that's my first point.

. . .My second point is the running out of petroleum is, there's some misconceptions there. When petroleum supplies come up short, it's not simply a matter of running out, of things going to run dry. It's a matter of costs going up greatly to extract the petroleum. Shell has recently had problems with overstating the reserves. It's probably a systemic problem throughout; all the petroleum reserves are overstated. The cost of extracting oil goes up as the supply diminishes. So, we aren't going to suddenly run out, but the costs are going to go up very dramatically and the cost of anything that runs on gasoline or diesel is going to go up dramatically. Obviously you will still need to get the energy somewhere, but with electrification, you have more options.

. . . And third point is about the impact to people living along the rail line. Personally, I find the aesthetics of overhead contact wires to be very miniscule. The downside of a minor bit of overhead wire is so small compared with the diesel fumes that you experience and the noise, living next to it, and I would bet that people living in areas of the country that currently have

electrified lines would object just as strongly as some of the people who are objecting to the overhead wires—or far more so—because they would not want the diesel pollution and the noise of reverting to old-fashioned diesel propulsion.

Ernie Hills:

What I'm concerned with is that we have to have a uniform policy for the areas of our service, and not tailor-made for every little [unintelligible] for people in certain areas. A good example: in Redwood City, they have had a policy that they want to control the speed of trains going through that town, and while I can understand that for some of the people that are close to that track, it would be a concern, that this has to be a single system from San Francisco to Gilroy, possibly in the future from Salinas to Monterey—we don't know where it's going to end up—but it has to be one system and we have to be united and not tailor-made our policy to everyone who bitches about some minor thing.